STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number 114071

TO: Rebecca Cook **Location: REM-4A65** **Art Unit: 1614** **Thursday, February 12, 2004** **Case Serial Number: 09/997490**	**From: Paul Schulwitz** **Location: Biotech-Chem Library** **REM-1A65** **Phone: (571)272-2527** **paul.schulwitz@uspto.gov**

4C70

Search Notes

Examiner Cook,

See attached results.

If you have any questions about this search feel free to contact me at any time.

Thank you for using STIC search services!

Paul Schulwitz
Technical Information Specialist
STIC Biotech/Chem Library
(571)272-2527

Paul Schulwitz 1140/1

Access DB# _____

SEARCH REQUEST FORM

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Scientific and Technical Information Center

FEB 11 2004

Requester's Full Name: Rebecca Ch Examiner #: 64826 Date: 2/4/04

Art Unit: 1614 Phone Number 30 571 272 0571 (STIC) Serial Number: 09/997490

Mail Box and Bldg/Room Location: Q4A65 Results Format Preferred (circle): PAPER DISK E-MAIL

4C70

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): George Kindness et

Earliest Priority Filing Date: 10/6/01

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please provide structures of celecoxib, atorvastatin, cyptine & search each of them separately to treat cancer. Search caplus, medline & other data base as appropriate.

Also search using COX-2 inhibitors & HMG-CoA reductase inhibitors separately & together to treat cancer.

Structures of Vitamin C, Vitamin E & search their use to treat cancer, as nutritional supplements during times of stress.

RECEIVED FEB 11 2004 TECHNOLOGY CENTER 1600

Thanks
Rebecca

STAFF USE ONLY	Type of Search	Vendors and cost where applicable
Searcher: _____	NA Sequence (#) _____	STN 936.55
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) _____	Questel/Orbit: _____
Date Searcher Picked Up: _____	Bibliographic ✓	Dr. Links _____
Date Completed: 2/12	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: 30	Fulltext ✓	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: 72	Other _____	Other (specify) _____

FILE HCAPLUS ENTERED AT 11:39:13 ON 12 FEB 2004

FILE COVERS 1907 - 12 Feb 2004 VOL 140 ISS 7
FILE LAST UPDATED: 11 Feb 2004 (20040211/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d que l23
L1 1 SEA FILE=REGISTRY ABB=ON PLU=ON VITAMIN C/CN
L4 6979 SEA FILE=HCAPLUS ABB=ON PLU=ON L1(L)(BAC OR DMA OR PAC OR PKT OR THU)/RL
L17 169466 SEA FILE=HCAPLUS ABB=ON PLU=ON ANTITUMOR AGENTS+OLD/CT
L18 500 SEA FILE=HCAPLUS ABB=ON PLU=ON L4 AND L17
L19 950 SEA FILE=HCAPLUS ABB=ON PLU=ON L1(L)(?CANCER? OR ?TUMOR? OR ?NEOPLAS?)
L20 207 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND L19
L21 18 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 AND REVIEW/DT
L22 27 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND REVIEW/DT
L23 27 SEA FILE=HCAPLUS ABB=ON PLU=ON L21 OR L22

Vit. C vs. Cancer

=> d que l29
L2 1 SEA FILE=REGISTRY ABB=ON PLU=ON VITAMIN E/CN
L7 4547 SEA FILE=HCAPLUS ABB=ON PLU=ON L2(L)(BAC OR DMA OR PAC OR PKT OR THU)/RL
L17 169466 SEA FILE=HCAPLUS ABB=ON PLU=ON ANTITUMOR AGENTS+OLD/CT
L24 458 SEA FILE=HCAPLUS ABB=ON PLU=ON L2(L)(?CANCER? OR ?TUMOR? OR ?NEOPLAS?)
L27 281 SEA FILE=HCAPLUS ABB=ON PLU=ON L7 AND L17
L28 117 SEA FILE=HCAPLUS ABB=ON PLU=ON L27 AND L24
L29 26 SEA FILE=HCAPLUS ABB=ON PLU=ON L28 AND REVIEW/DT

Vit E vs. Cancer

=> d que l40
L1 1 SEA FILE=REGISTRY ABB=ON PLU=ON VITAMIN C/CN
L2 1 SEA FILE=REGISTRY ABB=ON PLU=ON VITAMIN E/CN
L4 6979 SEA FILE=HCAPLUS ABB=ON PLU=ON L1(L)(BAC OR DMA OR PAC OR PKT OR THU)/RL
L7 4547 SEA FILE=HCAPLUS ABB=ON PLU=ON L2(L)(BAC OR DMA OR PAC OR PKT OR THU)/RL

```
L17      169466 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ANTITUMOR AGENTS+OLD/CT
L18         500 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L4 AND L17
L19         950 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1(L)(?CANCER? OR ?TUMOR? OR
                ?NEOPLAS?)
L20         207 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L18 AND L19
L24         458 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L2(L)(?CANCER? OR ?TUMOR? OR
                ?NEOPLAS?)
L27         281 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L7 AND L17
L28         117 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L27 AND L24
L40          32 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L28 AND L20
```

Vit C+E vs. cancer

```
=> s l23 or l29 or l40
L49          75 L23 OR L29 OR L40

=> b medline
FILE 'MEDLINE' ENTERED AT 11:39:53 ON 12 FEB 2004

 FILE LAST UPDATED: 11 FEB 2004 (20040211/UP).  FILE COVERS 1958 TO DATE.

 On December 14, 2003, the 2004 MeSH terms were loaded.  See HELP RLOAD
 for details.

 MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the
 MeSH 2004 vocabulary.  See http://www.nlm.nih.gov/mesh/ and
 http:\\www.nih.gov/pubs/yechbull/nd03/nd03_mesh.html for a description
 on changes.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> d que l34
L30        21771 SEA FILE=MEDLINE ABB=ON  PLU=ON  ASCORBIC ACID+PFT/CT
L31        82060 SEA FILE=MEDLINE ABB=ON  PLU=ON  ANTINEOPLASTIC AGENTS/CT
L32          186 SEA FILE=MEDLINE ABB=ON  PLU=ON  L30 AND L31
L33           90 SEA FILE=MEDLINE ABB=ON  PLU=ON  L32 AND (TU OR DT)
L34           14 SEA FILE=MEDLINE ABB=ON  PLU=ON  L33 AND REVIEW/DT
```

Vit. C vs. Cancer

```
=> d que l38
L31        82060 SEA FILE=MEDLINE ABB=ON  PLU=ON  ANTINEOPLASTIC AGENTS/CT
L35        17019 SEA FILE=MEDLINE ABB=ON  PLU=ON  "VITAMIN E"+PFT/CT
L36          141 SEA FILE=MEDLINE ABB=ON  PLU=ON  L35 AND L31
L37           70 SEA FILE=MEDLINE ABB=ON  PLU=ON  L36 AND (TU OR DT)
L38           22 SEA FILE=MEDLINE ABB=ON  PLU=ON  L37 AND REVIEW/DT
```

Vit. E vs. Cancer

```
=> d que l39
L30        21771 SEA FILE=MEDLINE ABB=ON  PLU=ON  ASCORBIC ACID+PFT/CT
L31        82060 SEA FILE=MEDLINE ABB=ON  PLU=ON  ANTINEOPLASTIC AGENTS/CT
L32          186 SEA FILE=MEDLINE ABB=ON  PLU=ON  L30 AND L31
L33           90 SEA FILE=MEDLINE ABB=ON  PLU=ON  L32 AND (TU OR DT)
L35        17019 SEA FILE=MEDLINE ABB=ON  PLU=ON  "VITAMIN E"+PFT/CT
L36          141 SEA FILE=MEDLINE ABB=ON  PLU=ON  L35 AND L31
L37           70 SEA FILE=MEDLINE ABB=ON  PLU=ON  L36 AND (TU OR DT)
L39            8 SEA FILE=MEDLINE ABB=ON  PLU=ON  L33 AND L37
```

Vit C+E vs. Cancer

```
=> s l34 or l38 or l39
L50          40 L34 OR L38 OR L39

=> b hcaplus
FILE 'HCAPLUS' ENTERED AT 11:40:28 ON 12 FEB 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1907 - 12 Feb 2004  VOL 140 ISS 7
FILE LAST UPDATED: 11 Feb 2004  (20040211/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> d que l11
L1             1 SEA FILE=REGISTRY ABB=ON  PLU=ON  VITAMIN C/CN
L3         33590 SEA FILE=HCAPLUS ABB=ON   PLU=ON  STRESS, ANIMAL+PFT,NT/CT
L4          6979 SEA FILE=HCAPLUS ABB=ON   PLU=ON  L1(L)(BAC OR DMA OR PAC OR
                 PKT OR THU)/RL
L6          1086 SEA FILE=HCAPLUS ABB=ON   PLU=ON  L1(L)(?STRESS? OR ?ANXIET?)
L11           48 SEA FILE=HCAPLUS ABB=ON   PLU=ON  L4 AND L6 AND L3
```

Vit C vs. Stress

```
=> d que l12
L2             1 SEA FILE=REGISTRY ABB=ON  PLU=ON  VITAMIN E/CN
L3         33590 SEA FILE=HCAPLUS ABB=ON   PLU=ON  STRESS, ANIMAL+PFT,NT/CT
L7          4547 SEA FILE=HCAPLUS ABB=ON   PLU=ON  L2(L)(BAC OR DMA OR PAC OR
                 PKT OR THU)/RL
L9           553 SEA FILE=HCAPLUS ABB=ON   PLU=ON  L2(L)(?STRESS? OR ?ANXIET?)
L12           33 SEA FILE=HCAPLUS ABB=ON   PLU=ON  L3 AND L7 AND L9
```

Vit E. vs Stress

```
=> d que l13
L1             1 SEA FILE=REGISTRY ABB=ON  PLU=ON  VITAMIN C/CN
L2             1 SEA FILE=REGISTRY ABB=ON  PLU=ON  VITAMIN E/CN
L3         33590 SEA FILE=HCAPLUS ABB=ON   PLU=ON  STRESS, ANIMAL+PFT,NT/CT
L4          6979 SEA FILE=HCAPLUS ABB=ON   PLU=ON  L1(L)(BAC OR DMA OR PAC OR
                 PKT OR THU)/RL
L6          1086 SEA FILE=HCAPLUS ABB=ON   PLU=ON  L1(L)(?STRESS? OR ?ANXIET?)
L7          4547 SEA FILE=HCAPLUS ABB=ON   PLU=ON  L2(L)(BAC OR DMA OR PAC OR
                 PKT OR THU)/RL
L9           553 SEA FILE=HCAPLUS ABB=ON   PLU=ON  L2(L)(?STRESS? OR ?ANXIET?)
L11           48 SEA FILE=HCAPLUS ABB=ON   PLU=ON  L4 AND L6 AND L3
```

```
L12           33 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L3 AND L7 AND L9
L13           10 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L11 AND L12
```

Vit. C+E vs. Stress

```
=> s l11 or l12 or l13
L51           71 L11 OR L12 OR L13

=> b medline
FILE 'MEDLINE' ENTERED AT 11:41:03 ON 12 FEB 2004

 FILE LAST UPDATED: 11 FEB 2004 (20040211/UP). FILE COVERS 1958 TO DATE.

 On December 14, 2003, the 2004 MeSH terms were loaded.  See HELP RLOAD
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 MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the
 MeSH 2004 vocabulary.  See http://www.nlm.nih.gov/mesh/ and
 http:\\www.nih.gov/pubs/yechbull/nd03/nd03_mesh.html for a description
 on changes.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> d que l45
L30        21771 SEA FILE=MEDLINE ABB=ON  PLU=ON  ASCORBIC ACID+PFT/CT
L41        29339 SEA FILE=MEDLINE ABB=ON  PLU=ON  STRESS+PFT/CT
L42          193 SEA FILE=MEDLINE ABB=ON  PLU=ON  L30 AND L41
L45           29 SEA FILE=MEDLINE ABB=ON  PLU=ON  L42 AND (DT OR TU)
```

Vit. C vs. Stress

```
=> d que l47
L35        17019 SEA FILE=MEDLINE ABB=ON  PLU=ON  "VITAMIN E"+PFT/CT
L41        29339 SEA FILE=MEDLINE ABB=ON  PLU=ON  STRESS+PFT/CT
L46           93 SEA FILE=MEDLINE ABB=ON  PLU=ON  L35 AND L41
L47           22 SEA FILE=MEDLINE ABB=ON  PLU=ON  L46 AND (DT OR TU)
```

Vit E vs. Stress

```
=> d que l48
L30        21771 SEA FILE=MEDLINE ABB=ON  PLU=ON  ASCORBIC ACID+PFT/CT
L35        17019 SEA FILE=MEDLINE ABB=ON  PLU=ON  "VITAMIN E"+PFT/CT
L41        29339 SEA FILE=MEDLINE ABB=ON  PLU=ON  STRESS+PFT/CT
L42          193 SEA FILE=MEDLINE ABB=ON  PLU=ON  L30 AND L41
L45           29 SEA FILE=MEDLINE ABB=ON  PLU=ON  L42 AND (DT OR TU)
L46           93 SEA FILE=MEDLINE ABB=ON  PLU=ON  L35 AND L41
L47           22 SEA FILE=MEDLINE ABB=ON  PLU=ON  L46 AND (DT OR TU)
L48            3 SEA FILE=MEDLINE ABB=ON  PLU=ON  L45 AND L47
```

Vit. C+E vs Stress

```
=> s l45 or l47 or l48
L52           48 L45 OR L47 OR L48

=> b stng
FILE 'STNGUIDE' ENTERED AT 11:41:37 ON 12 FEB 2004
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AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE
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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Feb 6, 2004 (20040206/UP).

=> dup rem l52 l50 l49 l51
FILE 'MEDLINE' ENTERED AT 11:42:02 ON 12 FEB 2004

FILE 'HCAPLUS' ENTERED AT 11:42:02 ON 12 FEB 2004
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COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)
PROCESSING COMPLETED FOR L52
PROCESSING COMPLETED FOR L50
PROCESSING COMPLETED FOR L49
PROCESSING COMPLETED FOR L51
L53 231 DUP REM L52 L50 L49 L51 (3 DUPLICATES REMOVED)
ANSWERS '1-88' FROM FILE MEDLINE
ANSWERS '89-231' FROM FILE HCAPLUS

=> d l53 bib ab 1-231

L53 ANSWER 1 OF 231 MEDLINE on STN DUPLICATE 1
AN 2001480361 MEDLINE
DN 21414439 PubMed ID: 11523588
TI Vitamin E analogues as inducers of apoptosis: implications for their potential antineoplastic role.
AU Neuzil J; Weber T; Terman A; Weber C; Brunk U T
CS Institute for Prevention of Cardiovascular Diseases, Ludwig Maximilians University, Munich, Germany.. jneuzil@klp.med.uni-muenchen.de
SO REDOX REPORT, (2001) 6 (3) 143-51. Ref: 77
Journal code: 9511366. ISSN: 1351-0002.
CY England: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 200202
ED Entered STN: 20010830
Last Updated on STN: 20020222
Entered Medline: 20020221
AB Recent evidence suggests that vitamin E and its analogues, which have been used for many years as antioxidants, may not only protect cells from free radical damage but also induce apoptotic cell death in various cell types. While alpha-tocopherol (alpha-TOH) is mainly known as an anti-apoptotic agent, its redox-silent analogues either have no influence on cell survival (alpha-tocopheryl acetate, alpha-TOA), or induce apoptosis (alpha-tocopheryl succinate, alpha-TOS). Although precise mechanisms of apoptosis induction by alpha-TOS remain to be elucidated, there is evidence that this process involves both the antiproliferative and membrane destabilising activities of the agent. Alpha-TOS has been shown to induce apoptosis in malignant cell lines but not, in general, in normal cells, and to inhibit tumorigenesis in vivo. These features suggest that this semi-synthetic analogue of vitamin E could be a promising antineoplastic agent.

L53 ANSWER 2 OF 231 MEDLINE on STN DUPLICATE 2
AN 2001496077 MEDLINE

DN 21428388 PubMed ID: 11544808
TI [Immunomodulating and antioxidant effects of vitamins A and E during air and immersion cooling].
Immunomoduliruiushchee i antioksidantnoe deistvie vitaminov A i E pri vozdushnom i immersionnom okhlazhdenii.
AU Uteshev B S; Bystrova N A; Brovkina I L; Avakian A R
CS Pharmacology Department, State Medical University, ul. Ostrovityanova 1, Moscow, 117437 Russia.
SO EKSPERIMENTALNAIA I KLINICHESKAIA FARMAKOLOGIIA, (2001 Jan-Feb) 64 (1) 60-2.
Journal code: 9215981. ISSN: 0869-2092.
CY Russia: Russian Federation
DT Journal; Article; (JOURNAL ARTICLE)
LA Russian
FS Priority Journals
EM 200110
ED Entered STN: 20010910
Last Updated on STN: 20011008
Entered Medline: 20011004
AB An important factor in the immunosuppression development on cooling is the increase in lipid peroxidation rate in the cell membranes. It was found that vitamins A and E possess a high immunomodulating and antioxidant activity under the acute cold-induced stress conditions. Administration of these vitamins is expedient for patients suffered from cooling in air of by immersion.

L53 ANSWER 3 OF 231 MEDLINE on STN
AN 2003533307 MEDLINE
DN PubMed ID: 14612885
TI Vitamin E succinate and cancer treatment: a vitamin E prototype for selective antitumour activity.
AU Neuzil J
CS School of Health Sciences, Griffith University, Southport 9726, Queensland, Australia.. j.nuezil@griffith.edu.au
SO British journal of cancer, (2003 Nov 17) 89 (10) 1822-6. Ref: 50
Journal code: 0370635. ISSN: 0007-0920.
CY England: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 200401
ED Entered STN: 20031113
Last Updated on STN: 20040108
Entered Medline: 20040107
AB Great hope has been given to micronutrients as anticancer agents, since they present natural compounds with beneficial effects for normal cells and tissues. One of these is vitamin E (VE), an antioxidant and an essential component of biological membranes and circulating lipoproteins. In spite of a number of epidemiological and intervention studies, little or no correlation between VE intake and incidence of cancer has been found. Recent reports have identified a redox-silent analogue of VE, alpha-tocopheryl succinate (alpha-TOS), as a potent anticancer agent with a unique structure and pharmacokinetics in vivo. alpha-TOS is highly selective for malignant cells, inducing them into apoptotic death largely via the mitochondrial route. The molecule of alpha-TOS may be modified so

that analogues with higher activity are generated. Finally, alpha-TOS and similar agents are metabolised to VE, thereby yielding a compound with a secondary beneficial activity. Thus, alpha-TOS epitomises a group of novel compounds that hold substantial promise as future anticancer drugs. The reasons for this optimistic notion are discussed in the following paragraphs.

L53 ANSWER 4 OF 231 MEDLINE on STN
AN 2003445581 MEDLINE
DN PubMed ID: 14505710
TI Ascorbic acid supplementation of diet for reduction of deltamethrin induced stress in freshwater catfish Clarias gariepinus.
AU Datta Madhuban; Kaviraj Anilava
CS Department of Zoology, University of Kalyani, Kalyani-741235, West Bengal, India.
SO Chemosphere, (2003 Dec) 53 (8) 883-8.
Journal code: 0320657. ISSN: 0045-6535.
CY England: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200311
ED Entered STN: 20030925
Last Updated on STN: 20031218
Entered Medline: 20031128
AB Static bioassays were made to evaluate efficiency of supplementation of ascorbic acid to remove stress of pyrethroid pesticide deltamethrin from freshwater catfish Clarias gariepinus. Clarias gariepinus exhibited several symptoms of stress when treated with deltamethrin (0.005 mg/l) for 24 h. Hepatosomatic index, liver glycogen, ascorbic acid of blood, liver, and kidney decreased while plasma glucose levels increased. Fish previously fed for 60 days with a diet supplemented by a high level of ascorbic acid (100 mg/100 g) could remove most of the stresses. Low levels of ascorbic acid supplement did not remove the stress. Dietary supplement of ascorbic acid at also appropriate level appeared to be a good way to counter toxicity of deltamethrin to the catfish.

L53 ANSWER 5 OF 231 MEDLINE on STN
AN 2003157214 MEDLINE
DN 22560577 PubMed ID: 12672706
TI Alpha-tocopheryl succinate, the most effective form of vitamin E for adjuvant cancer treatment: a review.
AU Prasad Kedar N; Kumar Bipin; Yan Xiang-Dong; Hanson Amy J; Cole William C
CS Center for Vitamins and Cancer Research, Department of Radiology, Campus Box C-278, University of Colorado Health Sciences Center, 4200 East 9th Avenue, Denver, CO 80262, USA.. kedar.prasad@UCHSC.edu
SO JOURNAL OF THE AMERICAN COLLEGE OF NUTRITION, (2003 Apr) 22 (2) 108-17.
Ref: 80
Journal code: 8215879. ISSN: 0731-5724.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 200310
ED Entered STN: 20030404

Last Updated on STN: 20031015
Entered Medline: 20031014

AB In 1982, it was established that alpha-tocopheryl succinate (alpha-TS) was the most effective form of vitamin E in comparison to alpha-tocopherol, alpha-tocopheryl acetate and alpha-tocopheryl nicotinate in inducing differentiation, inhibition of proliferation and apoptosis in cancer cells, depending upon its concentration. During the last two decades, several studies have confirmed this observation in rodent and human cancer cells in culture and in vivo (animal model). The most exciting aspect of this alpha-TS effect is that it does not affect the proliferation of most normal cells. In spite of several studies published on the anti-cancer properties of alpha-TS, the value of this form of vitamin E has not drawn significant attention from researchers and clinicians. Therefore, a critical review on the potential role of alpha-TS in the management of cancer is needed. In addition, such a review can also provide in-depth analysis of existing literature on this subject. alpha-TS treatment causes extensive alterations in gene expression; however, only some can be attributed to differentiation, inhibition of proliferation and apoptosis. alpha-TS also enhances the growth-inhibitory effect of ionizing radiation, hyperthermia, some chemotherapeutic agents and biological response modifiers on tumor cells, while protecting normal cells against some of their adverse effects. Thus, alpha-TS alone or in combination with dietary micronutrients can be useful as an adjunct to standard cancer therapy by increasing tumor response and possibly decreasing some of the toxicities to normal cells.

L53 ANSWER 6 OF 231 MEDLINE on STN
AN 2003253405 MEDLINE
DN 22661426 PubMed ID: 12776480
TI Vitamin C as a cancer treatment: state of the science and recommendations for research.
AU Tamayo Carmen; Richardson Mary Ann
NC 5 U24 CA66826-03 (NCI)
SO ALTERNATIVE THERAPIES IN HEALTH AND MEDICINE, (2003 May-Jun) 9 (3) 94-101. Ref: 180
Journal code: 9502013. ISSN: 1078-6791.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 200307
ED Entered STN: 20030603
Last Updated on STN: 20030718
Entered Medline: 20030717

L53 ANSWER 7 OF 231 MEDLINE on STN
AN 2003085654 MEDLINE
DN 22485076 PubMed ID: 12597353
TI Chemoprevention of lung cancer: soon daily practice?.
AU van Zandwijk Nico; Pastorino Ugo
CS Head Dept. Thoracic Oncology, Netherlands Cancer Institute, Amsterdam.. n.v.zandwijk@nki.nl
SO Expert Rev Anticancer Ther, (2003 Feb) 3 (1) 91-8. Ref: 80
Journal code: 101123358. ISSN: 1473-7140.
CY England: United Kingdom

DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 200304
ED Entered STN: 20030225
Last Updated on STN: 20030429
Entered Medline: 20030428
AB The statistics on lung cancer survival remain disappointing and form a powerful argument to develop new methods to control this most deadly form of cancer in both men and women. Chemoprevention is one of these new approaches. While carcinogens from cigarette smoke form an essential link between nicotine addiction and lung cancer, several investigations confirm that dietary and genetically determined factors play an important role in modulating the individual susceptibility and are linked to the chemoprevention approach. In spite of a large abundance of positive preclinical observations, most experiences with potential chemopreventive agents, such as retinoids and antioxidants in individuals at risk for lung cancer have been so far negative. Moreover, beta-carotene was associated with an increased lung cancer incidence in two large randomized studies, as a consequence of a negative interaction with smoking. On the other hand, recent progress in molecular biology has led to the discovery of specific approaches to chemoprevention and there considerable optimism regarding the potential of molecules and antibodies that target specific receptors or mutations. Epidermal growth factor receptor blocking agents, farnesyltransferase and cyclooxygenase inhibitors and 9-cis retinoic acid have been identified as promising candidates for studies in high risk populations. After more than 20 years of worldwide research, the prospects for effective lung cancer treatment are better than ever.

L53 ANSWER 8 OF 231 MEDLINE on STN
AN 2002710978 MEDLINE
DN 22360943 PubMed ID: 12473572
TI Targeting the mitochondria: an exciting new approach to myeloma therapy. Commentary re: N. J. Bahlis et al., Feasibility and correlates of arsenic trioxide combined with ascorbic acid-mediated depletion of intracellular glutathione for the treatment of relapsed/refractory multiple myeloma. Clin. Cancer Res., 8: 3658-3668, 2002.
CM Comment in: Clin Cancer Res. 2002 Dec;8(12):3658-68
AU Dalton William S
CS H. Lee Moffitt Cancer Center and Research Institute, Tampa, Florida 33612, USA.
SO CLINICAL CANCER RESEARCH, (2002 Dec) 8 (12) 3643-5. Ref: 16
Journal code: 9502500. ISSN: 1078-0432.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 200301
ED Entered STN: 20021217
Last Updated on STN: 20030122
Entered Medline: 20030121

L53 ANSWER 9 OF 231 MEDLINE on STN

AN 2002651011 MEDLINE
DN 22237240 PubMed ID: 12324201
TI Antioxidant nutrients and adriamycin toxicity.
AU Quiles Jose L; Huertas Jesus R; Battino Maurizio; Mataix Jose; Ramirez-Tortosa M Carmen
CS Department of Physiology, Institute of Nutrition and Food Technology, University of Granada, Ramon y Cajal 4, Spain.. jlquiles@ugr.es
SO TOXICOLOGY, (2002 Oct 30) 180 (1) 79-95. Ref: 143
Journal code: 0361055. ISSN: 0300-483X.
CY Ireland
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 200211
ED Entered STN: 20021105
Last Updated on STN: 20021211
Entered Medline: 20021114
AB The anthracycline antibiotic adriamycin (doxorubicin) is one of the most effective chemotherapeutic agents against a wide variety of cancers. However, its use is seriously limited by the development in the heart of acute and chronic toxic effects. Mechanisms of action and toxicity of adriamycin are briefly revised in this review. Among followed strategies to attenuate adriamycin toxicity are dosage optimisation, synthesis and use of analogues or combined therapy with antioxidants. The most promising results come from the combination of the drug delivery together with an antioxidant in order to reduce oxidative stress. Many antioxidants have been assayed with very different results. Among these molecules, metal ions chelators and low-molecular-mass agents that scavenge reactive oxygen species and that are synthesised in vivo have been widely studied. However, the present review will be exclusively focused on the antioxidants that are derived from the diet, in particular the role of vitamin E, vitamin C, vitamin A, coenzyme Q, flavonoids, antioxidant components of virgin olive oil and selenium.

L53 ANSWER 10 OF 231 MEDLINE on STN
AN 2002214509 MEDLINE
DN 21947985 PubMed ID: 11951081
TI A radical approach to cancer.
AU Das Undurti
CS EFA Sciences LLC, Norwood, MA 02062, USA.. undurti@hotmail.com
SO MEDICAL SCIENCE MONITOR, (2002 Apr) 8 (4) RA79-92. Ref: 173
Journal code: 9609063. ISSN: 1234-1010.
CY Poland
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, ACADEMIC)
LA English
FS Priority Journals
EM 200209
ED Entered STN: 20020413
Last Updated on STN: 20020927
Entered Medline: 20020926
AB Reactive oxygen species are known to be potentially dangerous, but are also needed for signal-transduction pathways. Tumor cells have relatively low amounts of superoxide dismutase (SOD), which quenches superoxide anion

(O2(-*)), and as a result of a higher level of aerobic metabolism, higher concentrations of O2(-*) , compared to normal cells. But this may not be true of all tumor cells. Some tumor cells have relatively higher amounts of vitamin E, a potent anti-oxidant, and a higher level of anaerobic metabolism, resulting in a balance that is tilted more towards higher anti-oxidant capacity. In both instances of higher aerobic and anaerobic metabolism methods designed to augment free radical generation in tumor cells can cause their death. It is suggested that free radicals and lipid peroxides suppress the expression of Bcl-2, activate caspases and shorten telomere, and thus inducing apoptosis of tumor cells. Ionizing radiation, anthracyclines, bleomycin and cytokines produce free radicals and thus are useful as anti-cancer agents. But they also produce many side-effects. 2-methoxyoestradiol and polyunsaturated fatty acids (PUFAs) inhibit SODs and cause an increase of O2(-*) in tumor cells leading to their death. In addition, PUFAs (especially gamma-linolenic acid), 2-methoxyoestradiol and thalidomide may possess anti-angiogenic activity. This suggests that free radicals can suppress angiogenesis. Limited clinical studies done with gamma-linolenic acid showed that it can regress human brain gliomas without any significant side-effects. Thus, PUFAs, thalidomide and 2-methoxyoestradiol or their derivatives may offer a new radical approach to the treatment of cancer.

L53 ANSWER 11 OF 231 MEDLINE on STN
AN 2001542162 MEDLINE
DN 21473586 PubMed ID: 11589062
TI Prostate cancer in the older man.
AU Ko Y J; Bubley G J
CS Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, Massachusetts, USA.
SO ONCOLOGY, (2001 Sep) 15 (9) 1113-9, 1123-4; discussion 1124-6, 1131. Ref: 58
Journal code: 8712059. ISSN: 0890-9091.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 200201
ED Entered STN: 20011009
Last Updated on STN: 20020125
Entered Medline: 20020107
AB Most men diagnosed with prostate cancer are more than 65 years of age. Therefore, a discussion of the issues surrounding the diagnosis, prevention, and treatment of prostate cancer in older men is, in many ways, a review of prostate cancer in general. Nonetheless, older patients with prostate cancer are often faced with a different set of problems than younger patients. For instance, if preventive strategies prove useful, they will have important implications for older men. Even a significant delay in diagnosis could greatly benefit the elderly population. Prostate-specific antigen (PSA) screening is controversial for men of any age but, for older men, screening may impart a risk to quality of life that may outweigh the potential advantages of diagnosis and treatment. Results of a large follow-up study of patients treated with radical prostatectomy suggest that even men with rising PSA values after surgery can have a relatively benign and protracted course. The survival rates noted in this study, however, were only for a select population of

surgical patients, and, in fact, higher prostate cancer death rates have been observed for patients adopting the watchful waiting approach. Older men who request some form of primary therapy are increasingly being treated with brachytherapy, despite the lack of randomized trials demonstrating efficacy compared to external-beam radiation therapy, surgery, or watchful waiting. Contrary to an often-held view, older prostate cancer patients may have more morbidity from long-term testosterone suppression than younger patients. On the other hand, chemotherapy seems to be as well tolerated overall in older patients as in younger patients.

L53 ANSWER 12 OF 231 MEDLINE on STN
AN 2001493654 MEDLINE
DN 21427607 PubMed ID: 11536389
TI Neuroprotective effects of Withania somnifera Dunn. in hippocampal sub-regions of female albino rat.
AU Jain S; Shukla S D; Sharma K; Bhatnagar M
CS Department of Zoology, University College of Science, M.L. Sukhadia University, Udaipur 313001, India.
SO PHYTOTHERAPY RESEARCH, (2001 Sep) 15 (6) 544-8.
Journal code: 8904486. ISSN: 0951-418X.
CY England: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200201
ED Entered STN: 20010906
Last Updated on STN: 20020125
Entered Medline: 20020107
AB The neuroprotective effects of W. somnifera were studied on stressed adult female Swiss albino rats. Experimental rats were subjected to immobilization stress for 14 h and were treated with a root powder extract of W. somnifera available as Stresscom capsules (Dabur India Ltd). Control rats were maintained in completely, non stressed conditions. Thionin stained serial coronal sections (7 microm) of brain passing through the hippocampal region of stressed rats (E(1) group) demonstrated 85% degenerating cells (dark cells and pyknotic cells) in the CA(2) and CA(3) sub-areas. Treatment with W. somnifera root powder extract significantly reduced (80%) the number of degenerating cells in both the areas. The study thus demonstrates the antistress neuroprotective effects of W. somnifera.

L53 ANSWER 13 OF 231 MEDLINE on STN
AN 2001213967 MEDLINE
DN 21115180 PubMed ID: 11220660
TI The role of molecular genetics in chemoprevention studies of prostate cancer.
AU Ross R K
SO IARC SCIENTIFIC PUBLICATIONS, (2001) 154 207-13. Ref: 39
Journal code: 8009542. ISSN: 0300-5038.
CY France
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals

EM 200104
ED Entered STN: 20010425
Last Updated on STN: 20010425
Entered Medline: 20010419
AB Research into the molecular genetics of prostate cancer to date has largely focused on the possible existence of one or several single-locus high-penetrance susceptibility genes and several candidate regions have been Identified, but confirmatory studies of these regions have been inconclusive. Increasingly, attention has turned to identification of candidate genes which may increase prostate cancer risk because their products play an important role in possible etiological pathways for prostate cancer. Of various such pathways which have been suggested for prostate cancer, the best studied in terms of molecular genetics is the androgen signalling pathway. Two genes in this pathway, the androgen receptor (AR) gene and the steroid 5-alpha reductase type II (SRD5A2) gene, have been under particular scrutiny and polymorphic markers in each of these genes that reproducibly predict prostate cancer risk have been identified. Such studies may have important implications for prostate cancer chemoprevention trials. As etiological pathways become better understood at the molecular level, piecing together multiple genetic variants in a pathway will allow identification of high-risk individuals and potential targets for chemopreventive interventions. Moreover, understanding the role of these genes in prostate cancer etiology may help in defining heterogeneity in response to such interventions. Finally, these genes or their products may themselves be legitimate targets for building a chemoprevention strategy.

L53 ANSWER 14 OF 231 MEDLINE on STN
AN 2001269363 MEDLINE
DN 21127450 PubMed ID: 11224693
TI Treatment of focal segmental glomerulosclerosis.
AU Passerini P; Ponticelli C
CS Division of Nephrology and Dialysis, IRCCS, Maggiore Hospital, Milan, Italy.. ponticel@polic.cilea.it
SO CURRENT OPINION IN NEPHROLOGY AND HYPERTENSION, (2001 Mar) 10 (2) 189-93.
Ref: 55
Journal code: 9303753. ISSN: 1062-4821.
CY England: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 200105
ED Entered STN: 20010529
Last Updated on STN: 20010529
Entered Medline: 20010521
AB The prognosis of untreated patients with focal segmental glomerulosclerosis is poor, as the disease progress to end-stage renal disease in approximately 50--70% of nephrotic patients. Although focal segmental glomerulosclerosis was initially considered to be a steroid-resistant disease, several studies have shown a better responsiveness to more prolonged courses of steroids. For patients with steroid-resistant or -dependent focal segmental glomerulosclerosis, cyclosporine A and cytotoxic agents have shown efficacy in clinical trials. Plasmapheresis or LDL-apheresis may represent a rescue treatment in patients who do not respond to other therapies. The role of other

agents used in focal segmental glomerulosclerosis, including azathioprine, mycophenolate mofetil, tacrolimus, pefloxacin or vitamin E is still poorly defined.

L53 ANSWER 15 OF 231 MEDLINE on STN
AN 2001681245 MEDLINE
DN 21586137 PubMed ID: 11728167
TI Influence of antioxidative vitamins A, C and E on lipid peroxidation in BOP-induced pancreatic cancer in Syrian hamsters.
AU Wenger F A; Kilian M; Ridders J; Stahlknecht P; Schimke I; Guski H; Jacobi C A; Muller J M
CS Department of General Visceral, Vascualr and Thoracic Surgery, Charite Campus Mitte, Humboldt-University of Berlin, Germany.. charipanc@aol.com
SO PROSTAGLANDINS LEUKOTRIENES AND ESSENTIAL FATTY ACIDS, (2001 Sep) 65 (3) 165-71.
Journal code: 8802730. ISSN: 0952-3278.
CY Scotland: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200112
ED Entered STN: 20011203
Last Updated on STN: 20020124
Entered Medline: 20011231
AB Persistent oxidative stress is thought to play an important role in carcinogenesis. Vitamins may influence oxygen radical metabolism and thus inhibit tumor growth. In the present trial the effects of Vitamins (Vit.) A, C and E on neoplastic growth and lipid peroxidation in pancreatic tissue were evaluated on chemically-induced pancreatic adenocarcinoma in the Syrian hamster. The incidence of pancreatic cancer was decreased by Vit. A (64.3%) and Vit. C (71.4%) as compared to the control group (100%, P<0.05). All vitamins increased the activity of superoxidedismutase (SOD) in pancreatic carcinomas. Accumulation of vitamins in tumor cells seems to be responsible for high levels of SOD and consecutive intracellular increase of hydrogen peroxide levels. Since this effect is selectively toxic for tumor cells it might be one of the mechanisms decreasing the incidence of pancreatic cancer in our trial.

L53 ANSWER 16 OF 231 MEDLINE on STN
AN 2001300522 MEDLINE
DN 21142919 PubMed ID: 11208955
TI Vitamin E: mechanisms of action as tumor cell growth inhibitors.
AU Kline K; Yu W; Sanders B G
CS Division of Nutrition and. School of Biological Sciences, The University of Texas at Austin, Austin, TX 78712, USA.. k.kline@mail.utexas.edu
NC CA59739 (NCI)
SO JOURNAL OF NUTRITION, (2001 Jan) 131 (1) 161S-163S. Ref: 25
Journal code: 0404243. ISSN: 0022-3166.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 200105
ED Entered STN: 20010604

Last Updated on STN: 20010604
Entered Medline: 20010531

L53 ANSWER 17 OF 231 MEDLINE on STN
AN 2001202656 MEDLINE
DN 21142918 PubMed ID: 11208954
TI Evaluation of the in vitro and in vivo antitumor activities of vitamin C and K-3 combinations against human prostate cancer.
AU Jamison J M; Gilloteaux J; Taper H S; Summers J L
CS Department of Urology, Summa Health Foundation and NEOUCOM, Rootstown, OH 44272, USA.. jmj@neoucom.edu
SO JOURNAL OF NUTRITION, (2001 Jan) 131 (1) 158S-160S. Ref: 24
Journal code: 0404243. ISSN: 0022-3166.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 200105
ED Entered STN: 20010604
Last Updated on STN: 20010604
Entered Medline: 20010531

L53 ANSWER 18 OF 231 MEDLINE on STN
AN 2001136095 MEDLINE
DN 21115931 PubMed ID: 11221959
TI Suppression of tumor growth and metastasis by dietary fish oil combined with vitamins E and C and cisplatin.
AU Yam D; Peled A; Shinitzky M
CS Department of Biological Chemistry, The Weizmann Institute of Science, Rehovot, Israel.
SO CANCER CHEMOTHERAPY AND PHARMACOLOGY, (2001) 47 (1) 34-40.
Journal code: 7806519. ISSN: 0344-5704.
CY Germany: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200103
ED Entered STN: 20010404
Last Updated on STN: 20010404
Entered Medline: 20010301
AB PURPOSE: The anticancer activity of omega-3 polyunsaturated fatty acids (omega-3 PUFA) has been shown in a large number of studies. This study was undertaken to analyze the combined effect of omega-3 PUFA and antioxidative vitamins on the level of spontaneous metastatic dissemination. The supportive effect of this dietary combination on chemotherapy with cisplatin (CP) was determined in parallel. METHODS: C57BL/6J mice bearing the Lewis lung carcinoma 3LL were fed ad libitum one of three isocaloric diets containing 5% soybean oil supplemented with 40 mg/kg alpha-tocopherol acetate (SO diet), or 4% fish oil plus 1% corn oil, and basal amounts of vitamin E (FO diet) or FO diet supplemented with vitamins E and C (FO+E+C diet). These diets were tested in combination with the conventional cytotoxic agent CP in a series of regimens. Tumor growth, feed consumption, body weight, lung metastasis and lung histology were followed. RESULTS: Both the FO dietary groups showed significantly lower tumor development than the SO group in all examined parameters,

indicating that omega-3 PUFA have anticancer activity. However, the FO diet, in comparison with the FO+E+C diet induced a significantly slower rate of tumor growth, and lower metastatic load, as reflected in lung weight. The decrease in the anticancer activity of FO by the addition of vitamins E and C suggests that in situ oxidation of omega-3 PUFA underlies their anticancer action. It is thus proposed that oxidized omega-3 PUFA accumulates in the membranes and the cytosol of tumor cells, reducing their vitality and eventually leading to their death. No signs of anorexia or cachexia were observed in either FO group, in contrast to the SO group. CP treatment with the SO diet had no apparent therapeutic effect, while with the FO diets it reduced the metastatic load. The best regimen of this combined treatment was FO diet followed by CP treatment with FO diet supplemented with vitamins E and C after resection of the primary growth. This regimen could be translated to a combined therapy for human cancer. CONCLUSIONS: Diets enriched with omega-3 PUFA may have beneficial anticancer effects in particular when containing only basal amounts of antioxidants such as vitamin E or C. Furthermore, the addition of drugs which promote oxidation of omega-3 PUFA, such as ferrous salts (e.g. as prescribed for the treatment of anemia), may further increase these effects. However, the supportive effect of omega-3 PUFA in chemotherapy (e.g. with CP) increases when vitamins E and C are also included.

L53 ANSWER 19 OF 231 MEDLINE on STN
AN 2001064389 MEDLINE
DN 20555157 PubMed ID: 11103660
TI Potential mechanisms of diet therapy for fibrocystic breast conditions show inadequate evidence of effectiveness.
AU Horner N K; Lampe J W
CS Division of Public Health Sciences, Fred Hutchinson Cancer Research Center, Seattle, WA 98109-1024, USA.
NC RO3 CA80648 (NCI)
SO JOURNAL OF THE AMERICAN DIETETIC ASSOCIATION, (2000 Nov) 100 (11) 1368-80. Ref: 106
Journal code: 7503061. ISSN: 0002-8223.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 200012
ED Entered STN: 20010322
Last Updated on STN: 20010322
Entered Medline: 20001222
AB Fibrocystic breast conditions, formerly referred to as fibrocystic breast disease, affect about half of all women and typically present as any combination of breast nodularity, swelling, and pain. We reviewed the literature to evaluate evidence supporting nutrition interventions commonly recommended for fibrocystic breast conditions by health care providers. Randomized, controlled studies of the effectiveness of caffeine restriction fail to support any benefit in fibrocystic breast conditions. Similarly, evidence supporting evening primrose oil, vitamin E, or pyridoxine as treatments for the discomforts of fibrocystic breast conditions is insufficient to draw conclusions about effectiveness. Dietary alterations that influence the intermediate markers for fibrocystic breast conditions include low-fat (15% to 20% energy),

high-fiber (30 g/day), and soy isoflavone regimens. However, our findings provide no solid evidence for secondary prevention or treatment of fibrocystic breast conditions through a dietary approach. Health care providers should limit recommendations to proven diet therapies supported by randomized, placebo-controlled trials, given the instability inherent in fibrocystic breast conditions and the near 20% placebo effect associated with intervention. Because excessive estrogen or altered sensitivity to estrogen is the dominant theory of etiology, interventions that may modulate endogenous steroid hormones warrant further investigation as potential treatments for symptomatic fibrocystic breast conditions.

L53 ANSWER 20 OF 231 MEDLINE on STN
AN 2000126354 MEDLINE
DN 20126354 PubMed ID: 10657911
TI Lung cancer chemoprevention.
AU Khuri F R; Lippman S M
CS Departments of Thoracic/Head and Neck Medical Oncology, The University of Texas M. D. Anderson Cancer Center, Houston, Texas 77030, USA.
SO SEMINARS IN SURGICAL ONCOLOGY, (2000 Mar) 18 (2) 100-5. Ref: 46
Journal code: 8503713. ISSN: 8756-0437.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 200003
ED Entered STN: 20000320
Last Updated on STN: 20000320
Entered Medline: 20000307
AB Lung cancer is the leading cause of cancer death in the United States. The persisting grim lung cancer incidence and mortality figures argue powerfully for new approaches such as chemoprevention for controlling this disease. Retinoids are among the most intensively studied cancer chemoprevention agents, including in the lung. Several randomized clinical or translational chemoprevention trials (e.g., of retinoids, beta-carotene, or combined folic acid and vitamin B(12)) have been conducted in lung pre-malignancy. Retinoid studies have produced important data on molecular/cellular markers of lung carcinogenesis, e.g., loss of heterozygosity (LOH) at 3p and 9p and retinoic acid receptor-beta (RAR-beta). Two large randomized trials with a lung cancer endpoint, the Alpha-Tocopherol, Beta-Carotene (ATBC) Prevention Study and the Beta-Carotene and Retinol Efficacy Trial (CARET), found that beta-carotene (+/- retinol) was harmful (in smokers). Recently completed lung-second-primary-tumor-prevention trials include the retinoids retinyl palmitate and 13-cis-retinoic acid (13cRA) and N-acetylcysteine (NAC). Vitamin E and selenium show promise for lung cancer prevention, based on positive secondary/subset analyses of three large-scale, randomized National Cancer Institute (NCI) cancer prevention trials. Future directions of lung cancer chemoprevention include the study of molecular markers of risk and drug activity, molecular targeting study, improved imaging techniques (e.g., molecular imaging) and new drug delivery systems.

L53 ANSWER 21 OF 231 MEDLINE on STN

AN 1999399110 MEDLINE
DN 99399110 PubMed ID: 10470124
TI Antitumor activity of benzo[a]phenothiazines.
AU Motohashi N; Kurihara T; Satoh K; Sakagami H; Mucsi I; Pusztai R; Szabo M; Molnar J
CS Meiji Pharmaceutical University, Tokyo, Japan.
SO ANTICANCER RESEARCH, (1999 May-Jun) 19 (3A) 1837-42. Ref: 20
Journal code: 8102988. ISSN: 0250-7005.
CY Greece
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 199909
ED Entered STN: 19991005
Last Updated on STN: 19991005
Entered Medline: 19990920
AB We have previously reported on the diverse biological activities of benzo[a]phenothiazines, such as the induction of antitumor and antimutagenic activity in vivo, and differentiation and apoptosis in vitro. The relationship of radical generation and pi-spin density or dipole moment was investigated, using quantum-chemical calculation with UHF/PM3. These data suggest that the origin of radical generation by active benzo[a]phenothiazines, which affect such biological activities might be N-atom at position 12.

L53 ANSWER 22 OF 231 MEDLINE on STN
AN 2000024263 MEDLINE
DN 20024263 PubMed ID: 10560473
TI Preventing heart disease and cancer. What randomized, primary-prevention studies show.
AU Lush D T
CS Primary Care Unit, MCP Hahnemann University, Philadelphia, PA, USA.
SO POSTGRADUATE MEDICINE, (1999 Oct 15) 106 (5) 143-8. Ref: 15
Journal code: 0401147. ISSN: 0032-5481.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW LITERATURE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 199911
ED Entered STN: 20000111
Last Updated on STN: 20000111
Entered Medline: 19991124
AB Several chemical agents appear to be useful in primary prevention of CAD and cancer. Randomized trials have found that in specific patient subgroups, tamoxifen and raloxifene decreased the occurrence of breast cancer, and lovastatin and aspirin decreased the frequency of CAD events. Secondary analysis of randomized primary-prevention studies has supported the use of vitamin E and selenium in cancer prevention.

L53 ANSWER 23 OF 231 MEDLINE on STN
AN 1999331930 MEDLINE
DN 99331930 PubMed ID: 10405044
TI Optimal dietary concentration of vitamin E for alleviating the effect of

heat stress on egg production in laying hens.
AU Bollengier-Lee S; Williams P E; Whitehead C C
CS Roslin Institute (Edinburgh), Midlothian, Scotland.
SO BRITISH POULTRY SCIENCE, (1999 Mar) 40 (1) 102-7.
Journal code: 15740290R. ISSN: 0007-1668.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199908
ED Entered STN: 19990816
Last Updated on STN: 19990816
Entered Medline: 19990803
AB 1. The effects of different dietary concentrations of vitamin E (alpha-tocopherol acetate) were investigated on laying hens exposed to chronic heat stress at 32 degrees C from 26 to 30 weeks of age. 2. Diets containing 5 dietary concentrations of vitamin E (a control diet containing 10 mg alpha-tocopherol/kg or this diet supplemented to contain 125, 250, 375 and 500 mg alpha-tocopherol/kg) were fed to 335 birds. Half of the birds received the supplemented diets for only 4 weeks before the heat stress period (short supplementation duration, SSD) and were fed on the control diet for a further 12 weeks. The remaining birds were fed on the supplemented diets throughout the experiment, 4 weeks before, 4 weeks during and 8 weeks after the heat stress period (long supplementation duration, LSD). 3. Egg production was significantly higher during (80-6 vs 68.9%, P<0.02) and after (75.3 vs 62.7%, P<0.02) the period of stress in the LSD group fed on the diet containing 250 mg vitamin E/kg compared with the group fed on the control diet. LSD birds given 375 and 500 mg vitamin E/kg also had higher egg production than control birds during heat stress but the differences failed to reach significance (74.6 vs 68.9% and 77.1 vs 68.9% respectively). In the SSD groups, mean egg production of the birds given the diets supplemented with 125 mg vitamin E/kg or more was significantly different from the control group after heat stress (70.3 vs 62.7%, P<0.05). Egg weight and food intake were similar in all the groups. 4. Plasma and liver vitamin E concentrations were proportional to the vitamin E intake before the stress period, dropped during heat stress in the SSD groups but were maintained at concentrations closer to those observed before heat stress in the LSD groups. 5. It is concluded that a dietary supplement of 250 mg vitamin E/kg provided before, during and after heat stress is optimum for alleviating, at least in part, the adverse effects of chronic heat stress in laying hens.

L53 ANSWER 24 OF 231 MEDLINE on STN
AN 97218583 MEDLINE
DN 97218583 PubMed ID: 9066020
TI Effects of vitamin E on monocyte acute stress response.
AU Anonymous
SO THROMBOSIS AND HAEMOSTASIS, (1997 Mar) 77 (3) 604-5.
Journal code: 7608063. ISSN: 0340-6245.
CY GERMANY: Germany, Federal Republic of
DT Letter
LA English
FS Priority Journals
EM 199706
ED Entered STN: 19970630
Last Updated on STN: 19970630
Entered Medline: 19970619

L53 ANSWER 25 OF 231 MEDLINE on STN
AN 1998155652 MEDLINE
DN 98155652 PubMed ID: 9494548
TI Comparative study of the antitumor action between sodium 5,6-benzylidene-L-ascorbate and sodium ascorbate (minireview).
AU Sakagami H; Satoh K; Kochi M
CS Department of Dental Pharmacology, Meikai University School of Dentistry, Saitama, Japan.
SO ANTICANCER RESEARCH, (1997 Nov-Dec) 17 (6D) 4451-2. Ref: 28
Journal code: 8102988. ISSN: 0250-7005.
CY Greece
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 199803
ED Entered STN: 19980407
Last Updated on STN: 19980407
Entered Medline: 19980326
AB This review summarizes our comparative study of the antitumor action of sodium 5,6-benzylidene-L-ascorbate (SBA) and sodium ascorbate. Both SBA and ascorbate produced ascorbate radicals during decomposition, elevated oxidation potential and oxidized methionine to methionine sulfoxide, in the regular culture medium. They induced apoptotic cell death (characterized by internucleosomal DNA fragmentation) in human myelogenous leukemic cell lines, but killed most of other tumor cell lines by necrosis without induction of internucleosomal DNA fragmentation. The cytotoxic activity of SBA and ascorbate was significantly enhanced in the presence of copper and the stimulation effect of copper was reduced by a heavy metal antagonist. However, the cytotoxic activity of SBA was only slightly modified by iron, cysteine analog or catalase, in contrast to ascorbate, which was highly sensitive to all these agents. Furthermore, intravenous administration of SBA induced degeneration in chemically-induced hepatocellular carcinoma whereas ascorbate was inactive. These data suggest the differential mode of antitumor action between these two compounds.

L53 ANSWER 26 OF 231 MEDLINE on STN
AN 97392572 MEDLINE
DN 97392572 PubMed ID: 9250786
TI Tretinoin tocoferil as a possible differentiation-inducing agent against myelomonocytic leukemia.
AU Makishima M; Honma Y
CS Department of Chemotherapy, Saitama Cancer Center Research Institute, Ina-machi, Japan.
SO LEUKEMIA AND LYMPHOMA, (1997 Jun) 26 (1-2) 43-8. Ref: 55
Journal code: 9007422. ISSN: 1042-8194.
CY Switzerland
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 199709
ED Entered STN: 19971013

Last Updated on STN: 19971013
Entered Medline: 19970926

AB Tretinoin tocoferil is an alpha-tocopherol ester of all-trans retinoic acid (ATRA) and safely used to treat skin ulcers. Tretinoin tocoferil stimulates the formation of granulation tissue in the ulcer, and enhances the migration of guinea pig macrophages and stimulates the proliferation of human skin fibroblasts. These effects are different from those of either ATRA or alpha-tocopherol. Tretinoin tocoferil induces the granulocytic differentiation of human promyelocytic leukemia HL-60 cells, and more than additively enhances cellular differentiation induced by sub-optimal concentrations of ATRA. Tretinoin tocoferil and ATRA synergistically inhibit the proliferation of HL-60 cells, suggesting that tretinoin tocoferil acts differently than ATRA on leukemia cells. Tretinoin tocoferil also enhances the differentiation of HL-60 cells induced by dimethyl sulfoxide, phorbol ester and 1alpha,25-dihydroxyvitamin D3(VD3). Tretinoin tocoferil and VD3 synergistically inhibit the proliferation and induce the differentiation of other myelomonocytic leukemia cells. Toxicity tests in animal models have shown that tretinoin tocoferil is at least 150 times less toxic than ATRA and does not induce teratogenesis. Therefore, the combination of tretinoin tocoferil and VD3 may be useful for treating myelomonocytic leukemia.

L53 ANSWER 27 OF 231 MEDLINE on STN
AN 96297694 MEDLINE
DN 96297694 PubMed ID: 8679274
TI [Prevention of second primary cancer with vitamin supplementation in patients treated for head and neck cancers].
Prevention des seconds cancers primaires par supplementation vitaminique chez les patients traites pour un cancer ORL.
AU Bairati I; Brochet F; Roy J; Gelinas M; Nabid A; Tetu B; Masse B; Meyer F
CS Groupe de recherche en epidemiologie de l'Universite Laval, Quebec, Canada.
SO BULLETIN DU CANCER. RADIOTHERAPIE, (1996) 83 (1) 12-6. Ref: 37
Journal code: 9005324. ISSN: 0924-4212.
CY France
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA French
FS Priority Journals
EM 199608
ED Entered STN: 19960828
Last Updated on STN: 19960828
Entered Medline: 19960820

AB Second primary cancers often occur in head and neck cancer patients successfully treated by radiation therapy. Experimental and epidemiological data suggest that these second primaries might be prevented by antioxidant vitamins, in particular beta-carotene and alpha-tocopherol. A randomized double-blind clinical trial is being conducted in Canada to determine whether vitamin supplementation with beta-carotene (30 mg/d) and alpha-tocopherol (400 IU/d) reduces the incidence of second primaries in head and neck cancer patients treated by radiation therapy.

L53 ANSWER 28 OF 231 MEDLINE on STN
AN 95244182 MEDLINE
DN 95244182 PubMed ID: 7537050

TI [Oxidative stress in the treatment of tumors and AIDS. Iatrogenic disease caused by antineoplastic agents. Preventive action of antioxidant agents]. Estres oxidativo en el tratamiento de tumores y en el S.I.D.A. Yatrogenia de los agentes antineoplasicos. Acciones preventivas de los agentes antioxidantes.
AU Romero Alvira D; Mur Villacampa M; Guerrero Navarro L; Gotor Lazaro M A
CS Hospital del INSALUD, Calatayud, Zaragoza.
SO REVISTA ESPANOLA DE ENFERMEDADES DIGESTIVAS, (1995 Jan) 87 (1) 38-48.
Ref: 128
Journal code: 9007566. ISSN: 1130-0108.
CY Spain
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA Spanish
FS Priority Journals; AIDS
EM 199505
ED Entered STN: 19950608
Last Updated on STN: 19970203
Entered Medline: 19950530

L53 ANSWER 29 OF 231 MEDLINE on STN
AN 95078887 MEDLINE
DN 95078887 PubMed ID: 7987360
TI alpha-Tocopherol supplementation in racing cyclists during extreme endurance training.
CM Comment in: Int J Sport Nutr. 1994 Sep;4(3):203-4
Comment in: Int J Sport Nutr. 1995 Jun;5(2):165-7
AU Rokitzki L; Logemann E; Huber G; Keck E; Keul J
CS Institute of Forensic Medicine, University Hospital, Freiburg, Germany.
SO INTERNATIONAL JOURNAL OF SPORT NUTRITION, (1994 Sep) 4 (3) 253-64.
Journal code: 9307702. ISSN: 1050-1606.
CY United States
DT (CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
(RANDOMIZED CONTROLLED TRIAL)
LA English
FS Priority Journals
EM 199501
ED Entered STN: 19950124
Last Updated on STN: 20021218
Entered Medline: 19950112
AB This study was undertaken to evaluate the effects of 5 months of alpha-tocopherol supplementation on physical performance during aerobic exercise training in 30 top-class cyclists. Antioxidative effects of supplementation were also studied. Plasma alpha-tocopherol concentration increased significantly in the vitamin E-supplemented group, whereas the placebo group showed a trend toward decrease. Physical performance did not improve in the alpha-tocopherol-supplemented group compared to the placebo group. Heart rates were also not significantly different. Lactate concentrations at the aerobic threshold and the anaerobic threshold were identical. Thus, there was no performance improvement in the alpha-tocopherol-supplemented group. However there was a significant reduction in CK in serum of the E-supplemented group. A trend toward decrease in GOT, GPT, and LDH was observed with alpha-tocopherol supplementation. Moreover, significantly reduced malondialdehyde serum levels were measured in the E-supplemented group. The findings indicate a

protective effect of alpha-tocopherol supplementation against oxidative stress induced by strenuous exercise.

L53 ANSWER 30 OF 231 MEDLINE on STN
AN 95272328 MEDLINE
DN 95272328 PubMed ID: 7752835
TI Apparent partial remission of breast cancer in 'high risk' patients supplemented with nutritional antioxidants, essential fatty acids and coenzyme Q10.
AU Lockwood K; Moesgaard S; Hanioka T; Folkers K
CS Private Outpatient Clinic, Copenhagen, Denmark.
SO MOLECULAR ASPECTS OF MEDICINE, (1994) 15 Suppl s231-40.
Journal code: 7603128. ISSN: 0098-2997.
CY ENGLAND: United Kingdom
DT (CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199506
ED Entered STN: 19950629
Last Updated on STN: 19950629
Entered Medline: 19950621
AB Thirty-two typical patients with breast cancer, aged 32-81 years and classified 'high risk' because of tumor spread to the lymph nodes in the axilla, were studied for 18 months following an Adjuvant Nutritional Intervention in Cancer protocol (ANICA protocol). The nutritional protocol was added to the surgical and therapeutic treatment of breast cancer, as required by regulations in Denmark. The added treatment was a combination of nutritional antioxidants (Vitamin C: 2850 mg, Vitamin E: 2500 iu, beta-carotene 32.5 iu, selenium 387 micrograms plus secondary vitamins and minerals), essential fatty acids (1.2 g gamma linolenic acid and 3.5 g n-3 fatty acids) and Coenzyme Q10 (90 mg per day). The ANICA protocol is based on the concept of testing the synergistic effect of those categories of nutritional supplements, including vitamin Q10, previously having shown deficiency and/or therapeutic value as single elements in diverse forms of cancer, as cancer may be synergistically related to diverse biochemical dysfunctions and vitamin deficiencies. Biochemical markers, clinical condition, tumor spread, quality of life parameters and survival were followed during the trial. Compliance was excellent. The main observations were: (1) none of the patients died during the study period. (the expected number was four.) (2) none of the patients showed signs of further distant metastases. (3) quality of life was improved (no weight loss, reduced use of pain killers). (4) six patients showed apparent partial remission.

L53 ANSWER 31 OF 231 MEDLINE on STN
AN 94359449 MEDLINE
DN 94359449 PubMed ID: 8078452
TI Vitamin E supplementation in the critically ill patient: too narrow a view?.
AU Kelly F J
SO NUTRITION IN CLINICAL PRACTICE, (1994 Aug) 9 (4) 141-5. Ref: 46
Journal code: 8606733. ISSN: 0884-5336.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)

LA English
FS Nursing Journals
EM 199410
ED Entered STN: 19941013
Last Updated on STN: 19941013
Entered Medline: 19941006
AB Oxidative stress plays an important contributory role in a number of diseases. In critically ill patients, oxidative stress is a major problem that results from a number of compounding factors such as supportive oxygen therapy, pulmonary inflammation, and the nutritional inadequacies of these patients. It has been known for some time that the circulating concentration of vitamin E, the primary lipid-soluble antioxidant, is low in critically ill patients. However, supplementation with vitamin E by oral loading has not been successful in improving clinical status. A better understanding of the bioavailability of vitamin E in these patients and of the synergistic action of other antioxidant nutrients such as vitamin C and glutathione with vitamin E has provided new opportunities to reexamine the use of antioxidant supplementation for the critically ill.

L53 ANSWER 32 OF 231 MEDLINE on STN
AN 94200145 MEDLINE
DN 94200145 PubMed ID: 8149899
TI Effect of vitamin E on some leucocytic parameters and functions in transported calves.
AU Mudron P; Kovac G; Bajova V; Pistl J; Choma J; Bartko P; Scholz H
CS University of Veterinary Medicine Kosice.
SO DTW. DEUTSCHE TIERARZTLICHE WOCHENSCHRIFT, (1994 Feb) 101 (2) 47-9.
Journal code: 7706565. ISSN: 0341-6593.
CY GERMANY: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199405
ED Entered STN: 19940523
Last Updated on STN: 19940523
Entered Medline: 19940506
AB The objective of this investigation was to determine the effect of vitamin E administration on leucocyte parameters and some of their functions in transported calves. In the study 8 calves, aged approx. 10 days, divided into two groups, were used. 20 mg of tocopheryl-acetate per kg body weight were administered orally to each of the 4 experimental calves 24 hours before loading. The calves were transported by road for 3 hours. Blood samples collected before and after the transportation were examined for total and differential leucocyte counts, T-lymphocyte subpopulation, phagocytic activity, leucocyte migration, serum immunoglobulin levels, and for plasma vitamin E and cortisol levels. The animals showed a leucocytosis with neutrophilia and lymphopenia after transportation. The administration of vitamin E led to a decrease of cortisol level in 24 hours. There was no difference between groups in cortisol reaction due to transportation stress. Leucocyte migration has been less inhibited in the control group after unloading. A mild decline in phagocytic activity was observed 3 hours after transportation. Serum immunoglobulins were unaffected by both vitamin E administration and transportation. Vitamin E had no significant effect on leucocyte function and cortisol levels in present study.

L53 ANSWER 33 OF 231 MEDLINE on STN

AN 93378576 MEDLINE
DN 93378576 PubMed ID: 8368957
TI Effect of dietary vitamin E supplementation and rotational stress on alveolar bone loss in rice rats.
AU Cohen M E; Meyer D M
CS Naval Dental Research Institute, Great Lakes, IL 60088.
SO ARCHIVES OF ORAL BIOLOGY, (1993 Jul) 38 (7) 601-6.
Journal code: 0116711. ISSN: 0003-9969.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Dental Journals; Priority Journals
EM 199310
ED Entered STN: 19931022
Last Updated on STN: 19931022
Entered Medline: 19931007
AB The effect of this supplementation on bone loss (distance from the cementum-enamel junction to the alveolar crest measured at the midline of the lingual aspect of each of the mandibular molar roots) was studied in rats that were either not stressed or stressed on a rotational device for 90 days. In the first study, neither vitamin E nor stress condition had statistically significant effects but there was substantial bone loss and bone-loss variability in all groups. Before the start of the second study, to reduce differences in bone loss that might otherwise exist before introduction of the treatments, rats received an antibiotic in their drinking water. In addition, rotational stress was introduced more abruptly than in the first study to reduce the likelihood of adaptation. Bone loss and bone-loss variability were substantially reduced in the second study. Analysis of these data indicated that vitamin E supplementation had a statistically significant protective effect, which was most pronounced at sites most susceptible to loss. Stressed subjects tended to lose more bone, but this effect was not significant. These findings suggest some role for vitamin E supplementation in the maintenance of periodontal health but also a sensitivity in this effect to initial periodontal status.

L53 ANSWER 34 OF 231 MEDLINE on STN
AN 94162586 MEDLINE
DN 94162586 PubMed ID: 8118001
TI [The stress-protective effect of a new derivative of n-3-polyunsaturated fatty acids].
Stress-protektornyi effekt novogo proizvodnogo n-3-polinenasyshchennykh zhirnykh kislot.
AU Kresiun V I; Iurlov V M; Tishchenko A V; Oleinik N N
SO BIULLETEN EKSPERIMENTALNOI BIOLOGII I MEDITSINY, (1993 Sep) 116 (9) 274-7.
Journal code: 0370627. ISSN: 0365-9615.
CY RUSSIA: Russian Federation
DT Journal; Article; (JOURNAL ARTICLE)
LA Russian
FS Priority Journals
EM 199404
ED Entered STN: 19940412
Last Updated on STN: 19940412
Entered Medline: 19940406
AB It has been established that prophylactic oral administration of the new derivative of n-3 polyunsaturated fatty acids--P-55 in a daily dose of 0.2 g/kg during 30 days prevents some morphological and physiological

manifestations of the chronic stress-syndrome in white rats. There were normalized body and some internal organs weights, content and distribution of ascorbic acid in the adrenal tissue; decreased intensity of gastric ulcerogenesis. The behaviour of animals became more quiet. It is concluded that the preparation P-55 has a stress-protective effect during its prophylactic administration.

L53 ANSWER 35 OF 231 MEDLINE on STN
AN 93349325 MEDLINE
DN 93349325 PubMed ID: 8394075
TI Effect of pretreatment with vitamin E or diazepam on brain metabolism of stressed rats.
AU Shaheen A A; Hamdy M A; Kheir-Eldin A A; Lindstrom P; el-Fattah A A
CS Department of Biochemistry, Faculty of Pharmacy, Cairo University, Egypt.
SO BIOCHEMICAL PHARMACOLOGY, (1993 Jul 6) 46 (1) 194-7.
Journal code: 0101032. ISSN: 0006-2952.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199309
ED Entered STN: 19930924
Last Updated on STN: 19930924
Entered Medline: 19930907
AB The effect of vitamin E (VE) or diazepam (DZ) pretreatment on some carbohydrate metabolic aspects in the brains of stressed rats was studied. DZ and VE were given i.p. at doses of 5 mg/kg body wt for 6 days prior to subjecting the animals to single swimming stress (SSS). Pretreatment of the rats with DZ or VE diminished the stress-induced increases in plasma corticosterone and glucose levels and reversed the decrease due to stress on brain ATP, glucose, glycogen and pyruvate contents. The increase in brain ADP and lactate was brought back to levels which approached the pre-stressed values. Moreover, DZ and VE pretreatments helped in attenuating the stress-induced alteration in brain mitochondrial and cytosolic hexokinase as well as sodium, potassium adenosine triphosphatase (Na+,K(+)-ATPase) activities. The change in these metabolic parameters produced by VE pre-treatment was less than that exhibited by DZ. The effects of VE were explained in light of its antioxidant property in preventing the free radical production and lipid peroxide formation which are important factors in the pathogenesis of stress.

L53 ANSWER 36 OF 231 MEDLINE on STN
AN 93343829 MEDLINE
DN 93343829 PubMed ID: 8343086
TI Treatment with vitamins A, D and E did not reduce weight loss in transported cattle.
AU Jubb T F; Pinch D S; Petty S R
CS Department of Agriculture, Kununurra, Western Australia.
SO AUSTRALIAN VETERINARY JOURNAL, (1993 May) 70 (5) 171-3.
Journal code: 0370616. ISSN: 0005-0423.
CY Australia
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199309
ED Entered STN: 19930917
Last Updated on STN: 19930917

Entered Medline: 19930902

AB Two field trials using an injectable vitamin A, D and E solution conducted in the pastoral environment of northern Australia are described. It was found that treatment of lighter (< 150 kg) or heavier (> 372 kg) weight cattle did not reduce weight loss during road transport. These findings contradict anecdotal evidence of reduced weight loss during transport with the use of vitamins A, D and E. The lack of scientific basis for their use is discussed.

L53 ANSWER 37 OF 231 MEDLINE on STN
AN 92304341 MEDLINE
DN 92304341 PubMed ID: 1610386
TI Exercise-induced oxidant stress in the lung tissue: role of dietary supplementation of vitamin E and selenium.
AU Veera Reddy K; Charles Kumar T; Prasad M; Reddanna P
CS School of Life Sciences, University of Hyderabad, India.
SO BIOCHEMISTRY INTERNATIONAL, (1992 Apr) 26 (5) 863-71.
Journal code: 8100311. ISSN: 0158-5231.
CY Australia
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199207
ED Entered STN: 19920731
Last Updated on STN: 19920731
Entered Medline: 19920717

AB Strenuous physical exercise in the form of swimming in female albino rats increased the oxidative reactions, probably leading to the generation of oxy-free radicals in the lung tissue. Free radical-mediated lipid peroxidation measured in the form of lipid peroxides increased in the pulmonary tissue in response to exhaustive exercise, indicating such a possibility. Dietary supplementation of vitamin E (Vit.E) and selenium (Se) for a period of 12 weeks reduced the oxidative reactions and the ensuing lipid peroxidation in the pulmonary tissue. Physical exercise in control animals induced the activity of superoxide dismutase (SOD), the superoxide anion radical (O2-.) quencher. However, the SOD levels in nutrient-fed animals at rest and after exercise remained well below the control levels, indicating the decreased generation of oxy-free radicals in them. Similarly, selenium-dependent glutathione peroxidase (Se-GSH Px), the enzyme involved in the reduction of organic and inorganic peroxides, and glutathione S- transferase (GST), the multifunctional protein involved in the detoxification of a number of xenobiotics, were increased in response to exercise in control animals, but were significantly decreased in nutrient-fed animals upon exercise. The induction of GST seems to be more towards the peroxidase activity of GST, i.e., non-selenium glutathione peroxidase (Non-Se-GSH Px), which is primarily involved in the reduction of endoperoxides. The studies thus indicate the induction of oxidative stress in the pulmonary tissue upon exhaustive physical exercise and the effectiveness of vit.E and Se independently and more so in combination in combating the exercise-induced oxidant stress.

L53 ANSWER 38 OF 231 MEDLINE on STN
AN 93038344 MEDLINE
DN 93038344 PubMed ID: 1417599
TI Effects of ascorbic acid on stress and disease in chickens.
AU Gross W B

CS Department of Large Animal Clinical Sciences, Virginia-Maryland Regional College of Veterinary Medicine, Virginia Polytechnic Institute and State University, Blacksburg 24061.
SO AVIAN DISEASES, (1992 Jul-Sep) 36 (3) 688-92.
Journal code: 0370617. ISSN: 0005-2086.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199211
ED Entered STN: 19930122
Last Updated on STN: 19930122
Entered Medline: 19921125
AB White leghorn chickens were given feed containing 100 mg of ascorbic acid (AA)/kg. One day later, treated chickens and a similar group of unmedicated control chickens were chilled for 1 hour at 6 C, exposed to an unusual sound, fasted, or subjected to rough handling. Heterophil:lymphocyte (H:L) ratios were determined one day later. The AA-treated birds had significantly lower H:L ratios than untreated controls. Chickens that received a diet containing AA had lower H:L ratios than controls (0.86 vs. 1.65) following administration of adrenocorticotropic hormone. Chickens fed a diet containing AA showed increased resistance to a combined Newcastle disease virus-Mycoplasma gallisepticum infection and to a secondary Escherichia coli infection, as well as to a primary E. coli challenge infection. The effects of AA and an antibacterial drug (furaltadone) were additive. In all experiments, the optimum dose of AA was 100 mg/kg of feed. There was a negative correlation between AA level in the diet and feed efficiency.

L53 ANSWER 39 OF 231 MEDLINE on STN
AN 92253593 MEDLINE
DN 92253593 PubMed ID: 1579593
TI Interactions among antioxidants in health and disease: vitamin E and its redox cycle.
AU Packer L
CS Department of Molecular and Cell Biology, University of California, Berkeley 94720.
NC CA 47597 (NCI)
SO PROCEEDINGS OF THE SOCIETY FOR EXPERIMENTAL BIOLOGY AND MEDICINE, (1992 Jun) 200 (2) 271-6. Ref: 30
Journal code: 7505892. ISSN: 0037-9727.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 199206
ED Entered STN: 19920619
Last Updated on STN: 19970203
Entered Medline: 19920611
AB Probably most diseases at some point during their course involve free radical reactions in tissue injury. In some cases, free radical reactions may be involved in multiple sites and at different stages of a chronic disease. So, both acute and degenerative diseases are thought to involve free radical reactions in tissue injury. An overview will be given of the evidence for the occurrence of free radicals and the importance of

antioxidant interventions, with particular reference to the lipophilic antioxidant vitamin E (tocopherols and tocotrienols).

L53 ANSWER 40 OF 231 MEDLINE on STN
AN 92331984 MEDLINE
DN 92331984 PubMed ID: 1628852
TI The effect of ascorbate supplementation on oxidative stress in the streptozotocin diabetic rat.
AU Young I S; Torney J J; Trimble E R
CS Department of Clinical Biochemistry, Queen's University of Belfast, Northern Ireland.
SO FREE RADICAL BIOLOGY AND MEDICINE, (1992) 13 (1) 41-6.
Journal code: 8709159. ISSN: 0891-5849.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199208
ED Entered STN: 19920904
Last Updated on STN: 19970203
Entered Medline: 19920819
AB An increase in oxidative stress may contribute to the development of diabetic complications. The key aqueous-phase chain-breaking antioxidant ascorbate is known to be deficient in diabetes, and we have therefore investigated the effects of ascorbate supplementation on oxidative stress in the streptozotocin diabetic rat. Markers of lipid peroxidation (malondialdehyde [MDA] and diene conjugates) were increased in plasma and erythrocytes of untreated diabetic animals, and levels of the antioxidants ascorbate and retinol were reduced. Plasma tocopherol was unchanged. Insulin treatment normalized MDA and ascorbate levels, although ascorbate metabolism remained disturbed, as indicated by increased levels of dehydroascorbate. High-dose ascorbate supplementation in the absence of insulin treatment restored plasma ascorbate to normal and increased plasma retinol and tocopherol levels. However, MDA and diene conjugate levels remained unchanged, possibly as a result of increased iron availability. High-dose ascorbate supplementation should be approached with caution in diabetes, as ascorbate may exert both antioxidant and prooxidant effects in vivo.

L53 ANSWER 41 OF 231 MEDLINE on STN
AN 91313324 MEDLINE
DN 91313324 PubMed ID: 1713347
TI [Therapy of immune thrombopenia].
Therapie der Immunthrombopenie.
AU Egli F
CS Medizinische Poliklinik, Universitatsspital Zurich.
SO SCHWEIZERISCHE MEDIZINISCHE WOCHENSCHRIFT. JOURNAL SUISSE DE MEDECINE, (1991 Jun 8) 121 (23) 851-7. Ref: 27
Journal code: 0404401. ISSN: 0036-7672.
CY Switzerland
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA German
FS Priority Journals
EM 199108
ED Entered STN: 19910913

Last Updated on STN: 19960129
Entered Medline: 19910827

AB Idiopathic thrombocytopenic purpura (ITP) belongs to the family of autoimmune diseases. The term "idiopathic", however, is no longer correct as it is in fact an immunologically-related thrombocytopenia. This is why nowadays it is referred to as immune thrombopenia. Clinically the acute and chronic forms of ITP can be distinguished. We discuss the different forms of treatment based upon data provided by various studies of ITP. If treatment with prednisone or with gammaglobulins fails, or after unsuccessful splenectomy, then alternative experimental therapies may have to be used. Some of these treatments are described with reference to their therapeutic benefit and their function.

L53 ANSWER 42 OF 231 MEDLINE on STN
AN 92160194 MEDLINE
DN 92160194 PubMed ID: 1788878
TI [Effect of alpha-tocopherol on adrenal cortex functions under stress]. Vliianie alpha-tokoferola na funktsiiu kory nadpochechnikov pri stresse.
AU Doroshkevich N A; Antsulevich S N; Vinogradov V V
SO UKRAINSKII BIOKHIMICHESKII ZHURNAL, (1991 Sep-Oct) 63 (5) 79-83.
Journal code: 7804246. ISSN: 0201-8470.
CY USSR
DT Journal; Article; (JOURNAL ARTICLE)
LA Russian
FS Priority Journals
EM 199203
ED Entered STN: 19920410
Last Updated on STN: 19920410
Entered Medline: 19920326
AB alpha-Tocopherol has been studied for its effect on lipid peroxidation and steroidogenesis in the adrenal cortices of rat and rabbit under stress. The vitamin is shown to exert an inhibitory effect on the lipid peroxidation developing under chronic stress. A biphasic pattern of the alpha-tocopherol effect on the steroidogenesis in the adrenal cortex is established: a decrease in the release of the steroids under the acute stress and maintaining of their levels under the chronic stress. A conclusion is drawn about a potential alpha-tocopherol application to correct the adrenal cortex function under stress.

L53 ANSWER 43 OF 231 MEDLINE on STN
AN 90262261 MEDLINE
DN 90262261 PubMed ID: 1693064
TI Amelioration of pulmonary toxicity of bleomycin by free radical scavengers.
AU Fujimoto J; Mori T; Takai S
CS Faculty of Medicine, Osaka University.
SO GAN TO KAGAKU RYOHO [JAPANESE JOURNAL OF CANCER AND CHEMOTHERAPY], (1990 Apr) 17 (4 Pt 2) 946-9. Ref: 19
Journal code: 7810034. ISSN: 0385-0684.
CY Japan
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA Japanese
FS Priority Journals
EM 199006
ED Entered STN: 19900720

Last Updated on STN: 19960129
Entered Medline: 19900628

L53 ANSWER 44 OF 231 MEDLINE on STN
AN 90117976 MEDLINE
DN 90117976 PubMed ID: 2609524
TI [The effect of tocopherol and ascorbic acid on the development of experimental esophageal tumors].
Vliianie tokoferola i askorbinovoi kisloty na razvitie eksperimental'nykh opukholei pishchevoda.
AU Bespalov V G; Troian D N; Petrov A S; Aleksandrov V A
SO VOPROSY ONKOLOGII, (1989) 35 (11) 1332-6.
Journal code: 0413775. ISSN: 0507-3758.
CY USSR
DT Journal; Article; (JOURNAL ARTICLE)
LA Russian
FS Priority Journals
EM 199002
ED Entered STN: 19900328
Last Updated on STN: 19900328
Entered Medline: 19900212
AB The study was concerned with the influence of tocopherol and ascorbic acid on induction of tumors by N-nitrososarcosine ethyl ester (NSEE) in rats. In the first series of experiments, NSEE was given orally in the daily dose of 100 mg/kg body weight during 8 weeks while alpha-tocopherol acetate was administered in the dose of 600 mg/kg food during the following 32 weeks. In the second series, NSEE was given intragastrically in the dose of 50 mg/kg body weight daily during 16 weeks whereas for the following 16 weeks, the animals received 20 g/kg food ascorbic acid. The rats were sacrificed at 40 (series 1) and 32 weeks (series 2) of the experiment. NSEE induced tumors of the esophagus and forestomach in more than 90% of cases, mainly papillomas and--less frequently--carcinomas, five tumors per rat, on the average. Treatment with tocopherol was followed by a 37% decrease in the incidence of esophageal and forestomach tumors, an approximately two-fold drop in their multiplicity as well as by lowered incidence of carcinomas. Ascorbic acid did not affect tumor induction.

L53 ANSWER 45 OF 231 MEDLINE on STN
AN 92199820 MEDLINE
DN 92199820 PubMed ID: 2520333
TI Ascorbic acid in cholesterol metabolism and in detoxification of xenobiotic substances: problem of optimum vitamin C intake.
AU Ginter E
CS Research Institute of Human Nutrition, Bratislava, Czechoslovakia.
SO NUTRITION, (1989 Nov-Dec) 5 (6) 369-74. Ref: 58
Journal code: 8802712. ISSN: 0899-9007.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 199204
ED Entered STN: 19920509
Last Updated on STN: 19920509
Entered Medline: 19920428

AB There are extreme contradictions in the question of an optimum intake of vitamin C. The Recommended Dietary Allowances (RDA) in the USA, Great Britain, and many other countries range from 30 to 60mg for an adult man or woman, whereas the proponents of megadoses recommend as much as 18,000mg per day. Critical opinions against both the official RDA and the hypothesis of megadoses are summarized. Ideal RDA should be based on studies with increasing vitamin C doses in which the efficiency of the ascorbate-dependent systems would be correlated with the vitamin C concentration in the target tissues. On the basis of correlations of the hepatic vitamin C levels in guinea pigs with the rate of cholesterol degradation and the activity of microsomal detoxification systems, it is suggested that such intake of ascorbic acid is optimum that ensures a maximum body pool and maximum steady-state levels of vitamin C in the tissues. It is probable that in healthy adults, such a dose ranges from 100 to 200mg and that in stress conditions, it exceeds 200mg per day.

L53 ANSWER 46 OF 231 MEDLINE on STN
AN 90196877 MEDLINE
DN 90196877 PubMed ID: 2629602
TI The antioxidant abnormality in the stress-susceptible pig. Effect of vitamin E supplementation.
AU Duthie G G; Arthur J R
CS Rowett Research Institute, Aberdeen, Scotland, United Kingdom.
SO ANNALS OF THE NEW YORK ACADEMY OF SCIENCES, (1989) 570 322-34.
Journal code: 7506858. ISSN: 0077-8923.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199004
ED Entered STN: 19900601
Last Updated on STN: 19900601
Entered Medline: 19900416

L53 ANSWER 47 OF 231 MEDLINE on STN
AN 89061553 MEDLINE
DN 89061553 PubMed ID: 3058111
TI Effect of environmental stress on the responses of ascorbic-acid-treated chickens to Escherichia coli challenge infection.
AU Gross W B
CS Department of Large Animal Clinical Science, Virginia-Maryland Regional College of Veterinary Medicine, Virginia Polytechnic Institute and State University, Blacksburg 24061.
SO AVIAN DISEASES, (1988 Jul-Sep) 32 (3) 432-6.
Journal code: 0370617. ISSN: 0005-2086.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198812
ED Entered STN: 19900308
Last Updated on STN: 19900308
Entered Medline: 19881229
AB As the stressfulness of the environment increased (measured as increasing heterophil/lymphocyte [H/L] ratios), resistance of chickens to Escherichia coli challenge infection increased. At a relatively low level of environmental stress (H/L ratio = 0.33), the incidence of severe lesions

was 22% in chickens fed diets containing 330 mg of ascorbic acid (AA)/kg and 80% in undosed controls. As the level of environmental stress increased, the dose of AA required for maximum reduction of the incidence of severe lesions increased, and the difference in lesion incidence between AA-dosed and undosed chickens decreased. When environmental stress resulted in H/L ratios of 0.53 or more, AA did not ameliorate the severity of infection. At levels of stress characterized by H/L ratios between 0.39 and 0.44, increasing doses of AA resulted in increased susceptibility to E. coli until a dose associated with maximum susceptibility was reached. Further increases in the dose of AA resulted in decreased susceptibility until a dose associated with maximum resistance was reached. In chickens fed feed containing 15 mg corticosterone/kg, increasing doses of AA resulted in increasing susceptibility to E. coli.

L53 ANSWER 48 OF 231 MEDLINE on STN
AN 87162603 MEDLINE
DN 87162603 PubMed ID: 3556642
TI [Effect of alpha-tocopherol acetate on the response of the lysosomal system of neutrophil leukocytes during exposure to immobilization stress]. Vliianie al'fa-tokoferola atsetata na reaktsiiu lizosomal'nogo apparata neitrofil'nykh leikotsitov pri deistvii immobilizatsionnogo stressa.
AU Agafonova N A; Lunina N V
SO FIZIOLOGICHESKII ZHURNAL, (1987 Jan-Feb) 33 (1) 57-63.
Journal code: 7806822. ISSN: 0201-8489.
CY USSR
DT Journal; Article; (JOURNAL ARTICLE)
LA Russian
FS Priority Journals
EM 198705
ED Entered STN: 19900303
Last Updated on STN: 19900303
Entered Medline: 19870501

L53 ANSWER 49 OF 231 MEDLINE on STN
AN 87239219 MEDLINE
DN 87239219 PubMed ID: 3296821
TI Chediak-Higashi syndrome.
AU Barak Y; Nir E
SO AMERICAN JOURNAL OF PEDIATRIC HEMATOLOGY/ONCOLOGY, (1987 Spring) 9 (1) 42-55. Ref: 82
Journal code: 7908071. ISSN: 0192-8562.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LA English
FS Priority Journals
EM 198706
ED Entered STN: 19900305
Last Updated on STN: 19900305
Entered Medline: 19870626
AB The use of cytochemical, electron microscopic, immunofluorescent, and tissue culture techniques has led to important advances in our understanding of the mechanisms underlying the pathogenesis of the Chediak-Higashi syndrome (CHS). This rare and fatal autosomal recessive disorder is clinically characterized by partial albinism, frequent pyogenic infections, and an accelerated lymphohistiocytic phase. The

pathological hallmark of CHS is the presence in all white blood cells of massive lysosomal inclusions, which are formed through a combined process of fusion, cytoplasmic injury, and phagocytosis. The abnormal inclusions exhibit both azurophilic and specific granular markers, and are probably responsible for most of the impaired leukocyte and other cell functions in CHS patients. In addition, a selective profound natural killer (NK) cell function and platelet storage pool deficiencies have been described in these patients. Impaired microtubule assembly and functions, mediated by abnormal intracellular cyclic nucleotide levels, which could be corrected by treatment with ascorbic acid, were suggested to be the pathophysiological basis for CHS abnormalities. However, some recent studies have questioned this cytoskeletal model, which is suggested to be rather a secondary manifestation of CHS.

L53 ANSWER 50 OF 231 MEDLINE on STN
AN 86230212 MEDLINE
DN 86230212 PubMed ID: 3520253
TI An antithrombotic role for nutritional antioxidants: implications for tumor metastasis and other pathologies.
AU McCarty M F
SO MEDICAL HYPOTHESES, (1986 Apr) 19 (4) 345-57. Ref: 93
Journal code: 7505668. ISSN: 0306-9877.
CY ENGLAND: United Kingdom
DT (CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LA English
FS Priority Journals
EM 198607
ED Entered STN: 19900321
Last Updated on STN: 19900321
Entered Medline: 19860707
AB Nutritional antioxidants support prostacyclin synthesis by preventing lipid hydroperoxide-mediated inhibition of prostacyclin synthetase. Recent preliminary clinical studies indicate that supplementary antioxidants exert antithrombotic effects in vivo that are most likely attributable to enhanced prostacyclin production. Optimal antioxidant nutrition may thus have preventive and therapeutic value for disorders in which inappropriate platelet aggregation plays an etiologic role, including MI, stroke, atherogenesis, pre-eclampsia, and the vascular complications of diabetes. In light of evidence that platelet aggregation encourages the implantation of hematogenous tumor metastases, supplemental antioxidants should also impede tumor dissemination--an effect which will be complemented by the immunostimulant actions of these nutrients. By exerting anticarcinogenic, immunostimulant and anti-metastatic effects, nutritional antioxidants should act to inhibit neoplasia at each stage of its development.

L53 ANSWER 51 OF 231 MEDLINE on STN
AN 85073997 MEDLINE
DN 85073997 PubMed ID: 3917362
TI Micronutrient requirements of cancer patients.
AU Hoffman F A
SO CANCER, (1985 Jan 1) 55 (1 Suppl) 295-300.
Journal code: 0374236. ISSN: 0008-543X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)

LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 198502
ED Entered STN: 19900320
Last Updated on STN: 19970203
Entered Medline: 19850205
AB Several major factors may influence the micronutrient requirements of the patient with cancer. These factors include the metabolic state of the malignancy and its effects on host metabolism, the catabolic effects of antineoplastic therapy, and other physiologic stresses commonly associated with the treatment of cancer, i.e., surgery, fever and infection. Although the nutritional importance of vitamins, minerals and trace elements is recognized, the optimal daily dose that will preserve lean body mass without enhancing tumor growth, is not known. Recommended Dietary Allowances (RDAs), where established, are based on populations with nonmalignant diseases. However, supplementation with vitamins, minerals, and certain trace elements is recommended for the cancer patient who requires prolonged parenteral support, since clinically relevant deficiency states have been described. The effect of malignancy on the metabolism of several of these micronutrients (iron, ascorbic acid, alpha tocopherol, selenium, zinc, copper) is discussed.

L53 ANSWER 52 OF 231 MEDLINE on STN
AN 86000919 MEDLINE
DN 86000919 PubMed ID: 4041586
TI [Effect of alpha-tocopheryl acetate on blood biochemical parameters in albino rats as affected by acoustic stress].
Vliianie al'fa-tokoferilatsetata na nekotorye biokhimicheskie parametry krovi belykh krys v usloviiakh akusticheskogo stressa.
AU Melkonian M M; Mkhitarian V G
SO BIULLETEN EKSPERIMENTALNOI BIOLOGII I MEDITSINY, (1985 Sep) 100 (9) 270-2.
Journal code: 0370627. ISSN: 0365-9615.
CY USSR
DT Journal; Article; (JOURNAL ARTICLE)
LA Russian
FS Priority Journals
EM 198511
ED Entered STN: 19900321
Last Updated on STN: 19900321
Entered Medline: 19851119
AB Experiments on random-bred white male rats have demonstrated the activation of induced lipid peroxidation in red cell membranes, elevation on the basal level of plasma lipid peroxides, a decrease in the content of alpha-tocopherol in plasma and red blood cell membranes, considerable shifts in the content of esterified and free cholesterol in plasma and red blood cell membranes under prolonged acoustic stress (91 dB). Administration of alpha-tocopheryl acetate in a dose of 1 mg/kg exerted a beneficial effect on the test parameters under prolonged acoustic stress.

L53 ANSWER 53 OF 231 MEDLINE on STN
AN 87059584 MEDLINE
DN 87059584 PubMed ID: 2946794
TI The effect of vitamin E and inderal on cardiac lesions induced by adrenergic-mediated stresses.
AU Ayobe M H; Sabh A R; Malak; Saleh A M; Abdel Tawab S
SO JOURNAL OF THE EGYPTIAN PUBLIC HEALTH ASSOCIATION, (1985) 60 (3-4) 129-49.
Journal code: 7505602. ISSN: 0013-2446.

CY Egypt
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Space Life Sciences
EM 198701
ED Entered STN: 19900302
Last Updated on STN: 20000303
Entered Medline: 19870112

L53 ANSWER 54 OF 231 MEDLINE on STN
AN 85236037 MEDLINE
DN 85236037 PubMed ID: 3891898
TI Vitamin C and chiropractic.
AU Dryburgh D R
SO JOURNAL OF MANIPULATIVE AND PHYSIOLOGICAL THERAPEUTICS, (1985 Jun) 8 (2) 95-103. Ref: 104
Journal code: 7807107. ISSN: 0161-4754.
Report No.: PIP-036487; POP-00159528.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LA English
FS Priority Journals; Population
EM 198508
ED Entered STN: 19900320
Last Updated on STN: 20021101
Entered Medline: 19850805
AB A review of the literature relating to possible clinical implications of ascorbic acid (AA) supplementation was conducted. Factors requiring a higher AA intake include smoking, alcohol ingestion, stress, diabetes mellitus, pregnancy, and certain drugs, including oral contraceptives, some antibiotics, acetylsalicylate and anti-inflammatory medications. AA has been found to significantly increase wound healing, reduce the inflammatory response, lessen respiratory distress, enhance immune function and serve to benefit many common conditions including osteoarthritis. It is concluded that vitamin C supplementation could be utilized for many conditions seen by chiropractors.

L53 ANSWER 55 OF 231 MEDLINE on STN
AN 83272811 MEDLINE
DN 83272811 PubMed ID: 6348694
TI [Role of vitamin E in adaptation and stress processes in premature infants].
Rol' vitamina E v protsessakh adaptatsii i stressa u nedonoshennykh detei.
AU Aripova A A
SO PEDIATRIIA, (1983 May) (5) 70-2. Ref: 49
Journal code: 0405563. ISSN: 0031-403X.
CY USSR
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LA Russian
FS Priority Journals
EM 198309
ED Entered STN: 19900319
Last Updated on STN: 20000303
Entered Medline: 19830923

L53 ANSWER 56 OF 231 MEDLINE on STN
AN 83069686 MEDLINE
DN 83069686 PubMed ID: 6755919
TI [Current views on tumor treatment with large doses of vitamin C]. Wspolczesne poglady na leczenie nowotworow duzymi dawkami witaminy C.
AU Plominski P; Stepka K
SO WIADOMOSCI LEKARSKIE, (1982 Sep 1) 35 (14) 889-93. Ref: 42
Journal code: 9705467. ISSN: 0043-5147.
CY Poland
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LA Polish
FS Priority Journals
EM 198301
ED Entered STN: 19900317
Last Updated on STN: 19900317
Entered Medline: 19830119

L53 ANSWER 57 OF 231 MEDLINE on STN
AN 82185178 MEDLINE
DN 82185178 PubMed ID: 6176385
TI Current concepts in iron metabolism.
AU Aisen P
SO CLINICS IN HAEMATOLOGY, (1982 Jun) 11 (2) 241-57. Ref: 89
Journal code: 0331547. ISSN: 0308-2261.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LA English
FS Priority Journals
EM 198207
ED Entered STN: 19900317
Last Updated on STN: 19970203
Entered Medline: 19820719

L53 ANSWER 58 OF 231 MEDLINE on STN
AN 83152824 MEDLINE
DN 83152824 PubMed ID: 6925966
TI Ascorbate (vit C) utilisation in humans when subjected to moderate/heavy physiological stress.
AU Mowle A F
SO AUSTRALASIAN NURSES JOURNAL, (1982 Oct) 11 (9) 13-6.
Journal code: 0367666. ISSN: 0301-018X.
CY Australia
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Nursing Journals
EM 198304
ED Entered STN: 19900318
Last Updated on STN: 19900318
Entered Medline: 19830407

L53 ANSWER 59 OF 231 MEDLINE on STN
AN 82103335 MEDLINE
DN 82103335 PubMed ID: 7321921
TI Vitamin C, titrating to bowel tolerance, anascorbemia, and acute induced scurvy.

AU Cathcart R F
SO MEDICAL HYPOTHESES, (1981 Nov) 7 (11) 1359-76.
Journal code: 7505668. ISSN: 0306-9877.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198203
ED Entered STN: 19900317
Last Updated on STN: 19980206
Entered Medline: 19820322
AB A method of utilizing vitamin C in amounts just short of the doses which produce diarrhea is described (TITRATING TO BOWEL TOLERANCE). The amount of oral ascorbic acid tolerated by a patient without producing diarrhea increase somewhat proportionately to the stress or toxicity of his disease. Bowel tolerance doses of ascorbic acid ameliorate the acute symptoms of many diseases. Lesser doses often have little effect on acute symptoms but assist the body in handling the stress of disease and may reduce the morbidity of the disease. However, if doses of ascorbate are not provided to satisfy this potential draw on the nutrient, first local tissues involved in the disease, then the blood, and then the body in general becomes deplete of ascorbate (ANASCORBEMIA and ACUTE INDUCED SCURVY). The patient is thereby put at risk for complications of metabolic processes known to be dependent upon ascorbate.

L53 ANSWER 60 OF 231 MEDLINE on STN
AN 81156717 MEDLINE
DN 81156717 PubMed ID: 7010962
TI Anti-inflammatory, immunologic and carcinostatic attributes of selenium in experimental animals.
AU Spallholz J E
SO ADVANCES IN EXPERIMENTAL MEDICINE AND BIOLOGY, (1981) 135 43-62. Ref: 49
Journal code: 0121103. ISSN: 0065-2598.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LA English
FS Priority Journals
EM 198105
ED Entered STN: 19900316
Last Updated on STN: 19900316
Entered Medline: 19810528

L53 ANSWER 61 OF 231 MEDLINE on STN
AN 81232185 MEDLINE
DN 81232185 PubMed ID: 6910415
TI To run or not to run - that is the question and reply: ascorbate (Vit. C) utilisation and stressful physical exertion.
AU Mowle A F
SO AUSTRALASIAN NURSES JOURNAL, (1981 Jan-Feb) 10 (2) 29-30.
Journal code: 0367666. ISSN: 0301-018X.
CY Australia
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Nursing Journals
EM 198108
ED Entered STN: 19900316

Last Updated on STN: 19900316
Entered Medline: 19810820

L53 ANSWER 62 OF 231 MEDLINE on STN
AN 81011232 MEDLINE
DN 81011232 PubMed ID: 6997665
TI Modulation of the effects of tumor therapeutic agents by vitamin C.
AU Prasad K N
SO LIFE SCIENCES, (1980 Jul 28) 27 (4) 275-80. Ref: 32
Journal code: 0375521. ISSN: 0024-3205.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LA English
FS Priority Journals
EM 198011
ED Entered STN: 19900316
Last Updated on STN: 19970203
Entered Medline: 19801125

L53 ANSWER 63 OF 231 MEDLINE on STN
AN 80234777 MEDLINE
DN 80234777 PubMed ID: 7393920
TI Vitamin E increases the growth inhibitory and differentiating effects of tumor therapeutic agents on neuroblastoma and glioma cells in culture.
AU Prasad K N; Edwards-Prasad J; Ramanujam S; Sakamoto A
SO PROCEEDINGS OF THE SOCIETY FOR EXPERIMENTAL BIOLOGY AND MEDICINE, (1980 Jun) 164 (2) 158-63.
Journal code: 7505892. ISSN: 0037-9727.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198009
ED Entered STN: 19900315
Last Updated on STN: 19900315
Entered Medline: 19800926

L53 ANSWER 64 OF 231 MEDLINE on STN
AN 79148055 MEDLINE
DN 79148055 PubMed ID: 428309
TI [Regulating effect of alpha-tocopherol on the conductivity of bilayer phospholipid membranes constructed from brain and liver phospholipids of stressed rats].
Reguliruiushchee deistvie alpha-tokoferola na provodimost' bisloinykh fosfolipidnykh membran, postroennykh iz fosfolipidov mozga i pecheni krys pri stressovykh sostoianiiakh organizma.
AU Agadzhanov M I; Badzhinian S A; Karagezian K G; Mkhitarian V G
SO DOKLADY AKADEMII NAUK SSSR, (1979) 244 (6) 1496-9.
Journal code: 7505465. ISSN: 0002-3264.
CY USSR
DT Journal; Article; (JOURNAL ARTICLE)
LA Russian
FS Priority Journals
EM 197906
ED Entered STN: 19900315
Last Updated on STN: 19900315

Entered Medline: 19790611

L53 ANSWER 65 OF 231 MEDLINE on STN
AN 80037790 MEDLINE
DN 80037790 PubMed ID: 386616
TI [Drug preparations of sea buckthorn (a review of the literature)]. Lekarstvennye preparaty oblepikhi (obzor literatury).
AU Pashchuk A Iu; Kostrikova E V; Shraiber M S
SO VRACHEBNOE DELO, (1979 Sep) (9) 3-7. Ref: 53
Journal code: 0413607. ISSN: 0049-6804.
CY USSR
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LA Russian
FS Priority Journals
EM 197912
ED Entered STN: 19900315
Last Updated on STN: 19900315
Entered Medline: 19791220

L53 ANSWER 66 OF 231 MEDLINE on STN
AN 79069258 MEDLINE
DN 79069258 PubMed ID: 722347
TI Ascorbic acid and stress ulcer in the rat.
AU Glavin G B; Pare W P; Vincent G P Jr
SO JOURNAL OF NUTRITION, (1978 Dec) 108 (12) 1969-75.
Journal code: 0404243. ISSN: 0022-3166.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 197902
ED Entered STN: 19900314
Last Updated on STN: 19900314
Entered Medline: 19790221
AB Rats were orally administered ascorbic acid at a dose of 30 g/liter during either total starvation, partial starvation, the activity-stress ulcer procedure, or the restraint-cold procedure. In four experiments, ascorbic acid failed to exert significant protective action against stomach ulcer formation and, in fact, may have potentiated the ulcerogenic process.

L53 ANSWER 67 OF 231 MEDLINE on STN
AN 78239286 MEDLINE
DN 78239286 PubMed ID: 210053
TI [Participation of thyrocalcitonin in the development of stress]. Uchastie tirokal'tsitonina v razvitil stressa.
AU Drzhevetskaia I A; Mishina N F
SO FIZIOLOGICHESKII ZHURNAL SSSR IMENI I. M. SECHENOVA, (1978 Jun) 64 (6) 864-8.
Journal code: 0427673. ISSN: 0015-329X.
CY USSR
DT Journal; Article; (JOURNAL ARTICLE)
LA Russian
FS Priority Journals; Space Life Sciences
EM 197810
ED Entered STN: 19900314
Last Updated on STN: 20000303

Entered Medline: 19781018

AB The immobilization stress in rats entailed raise of calcium content in the plasma followed by a decrease to the hypocalcaemic level. The thyrocalcitonin activity of plasma was undetectable in intact rats, but increased to 5 mU/ml after 3 hrs of stress. Administration of bovine thyrocalcitonin (10 U/100 g) before the immobilization inhibited the lowering of CRF activity of hypothalamic extracts, ACTH content of hypophysis, and ascorbic acid concentration in adrenal glands of the rats under stress, i.e. inhibited the development of stress reaction.

L53 ANSWER 68 OF 231 MEDLINE on STN
AN 79059222 MEDLINE
DN 79059222 PubMed ID: 717181
TI Histamine degradative potential of ascorbic acid: considerations and evaluations.
AU Subramanian N
SO AGENTS AND ACTIONS, (1978 Oct) 8 (5) 484-7.
Journal code: 0213341. ISSN: 0065-4299.
CY Switzerland
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 197901
ED Entered STN: 19900314
Last Updated on STN: 19900314
Entered Medline: 19790124

L53 ANSWER 69 OF 231 MEDLINE on STN
AN 77240313 MEDLINE
DN 77240313 PubMed ID: 883727
TI Acute cobalt and isoproterenol cardiotoxicity in swine: protection by selenium-vitamin E supplementation and potentiation by stress-susceptible phenotype.
AU Van Vleet J F; Rebar A H; Ferrans V J
SO AMERICAN JOURNAL OF VETERINARY RESEARCH, (1977 Jul) 38 (7) 991-1002.
Journal code: 0375011. ISSN: 0002-9645.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 197709
ED Entered STN: 19900314
Last Updated on STN: 19970203
Entered Medline: 19770917

L53 ANSWER 70 OF 231 MEDLINE on STN
AN 77124519 MEDLINE
DN 77124519 PubMed ID: 798150
TI Significance of vitamins in cancer.
AU Basu T K
SO ONCOLOGY, (1976) 33 (4) 183-7. Ref: 57
Journal code: 0135054. ISSN: 0030-2414.
CY Switzerland
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LA English
FS Priority Journals

EM 197704
ED Entered STN: 19900313
Last Updated on STN: 19900313
Entered Medline: 19770430
AB The relationship of vitamins to cancer is very complex. Three types of interactions are possible: the effect of vitamins on tumor growth, the effect of tumors on vitamin metabolism, and the effect of vitamins on chemical carcinogens and anti-tumor chemotherapeutic agents. The significance of vitamins with particular references to vitamins A,B-complex and C, in cancer has been reviewed.

L53 ANSWER 71 OF 231 MEDLINE on STN
AN 76055292 MEDLINE
DN 76055292 PubMed ID: 171775
TI Newer treatment in dermatology.
AU Rees R B
SO SOUTHERN MEDICAL JOURNAL, (1975 Nov) 68 (11) 1395-1400. Ref: 0
Journal code: 0404522. ISSN: 0038-4348.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 197601
ED Entered STN: 19900313
Last Updated on STN: 19900313
Entered Medline: 19760123
AB The future of a drug depends upon what it can do in the hands of the practitioner. Medicine is practiced on the basis of probabilities, and treatment must be selected which has the best chance of helping the patient, with the least amount of harm. There are many new drugs available for dermatologic therapy in other developed countries which are not available in this country, due to peculiarities of federal drug regulations.

L53 ANSWER 72 OF 231 MEDLINE on STN
AN 76210673 MEDLINE
DN 76210673 PubMed ID: 1227917
TI [Morphofunctional manifestations of rat adrenal cortical reaction to the administration of sodium bromide under conditions of hypodynamic stress]. Morfofunktsional'nye proiavleniia kory nadpochechnikov krys na vvedenie bromida natriia v usloviiakh gipodinamicheskogo stressa.
AU Kirichek L T; Zholudeva V I
SO FARMAKOLOGIIA I TOKSIKOLOGIIA, (1975 Nov-Dec) 38 (6) 703-6.
Journal code: 16920420R. ISSN: 0014-8318.
Report No.: NASA-76210673.
CY USSR
DT Journal; Article; (JOURNAL ARTICLE)
LA Russian
FS Priority Journals; Space Life Sciences
EM 197609
ED Entered STN: 19900313
Last Updated on STN: 19900313
Entered Medline: 19760901
AB Experiments conducted on rats by employing functional and morphological methods of investigation showed bromine to weaken the function of the adrenal cortex in intach rats, producing changes analogous to those of a

hypodynamic stress (2-hour immobilization on the operating table). A combined preliminary introduction of bromine and immobilization is attended by a less pronounced stress reaction and brings about normalization of the ascorbic acid content in the adrenals with the appearance of well-marked morphological signs pointing to the compensation of the adrenal cortex functions.

L53 ANSWER 73 OF 231 MEDLINE on STN
AN 76200509 MEDLINE
DN 76200509 PubMed ID: 1226662
TI [Therapeutic value of ascorbic acid in the pre- and postoperative periods in complicated ulcer disease].
Lechebnoe znachenie askorbinovoi kisloty v do- i nosleoperatsionnom periodakh dlia bol'nykh oslozhnennoi iazvennoi bolezn'iu.
AU Mordvinkina T N
SO VESTNIK KHIRURGII IMENI I. I. GREKOVA, (1975 Jan) 114 (1) 143-5.
Journal code: 0411377. ISSN: 0042-4625.
CY USSR
DT Journal; Article; (JOURNAL ARTICLE)
LA Russian
FS Priority Journals
EM 197608
ED Entered STN: 19900313
Last Updated on STN: 20000303
Entered Medline: 19760802

L53 ANSWER 74 OF 231 MEDLINE on STN
AN 73164887 MEDLINE
DN 73164887 PubMed ID: 4633567
TI Vitamin C requirements of the vervet monkey (Cercopithecus aethiops) under experimental conditions.
AU de Klerk W A; du Plessis J P; van der Watt J J; de Jager A; Laubscher N F
SO SOUTH AFRICAN MEDICAL JOURNAL, (1973 Apr 28) 47 (16) 705-8.
Journal code: 0404520. ISSN: 0038-2469.
CY South Africa
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 197306
ED Entered STN: 19900310
Last Updated on STN: 19970203
Entered Medline: 19730621

L53 ANSWER 75 OF 231 MEDLINE on STN
AN 74087870 MEDLINE
DN 74087870 PubMed ID: 4359507
TI An introductory note to ginseng.
AU Li C P; Li R C
SO AMERICAN JOURNAL OF CHINESE MEDICINE, (1973 Jul) 1 (2) 249-61.
Journal code: 0354717. ISSN: 0090-2942.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 197403
ED Entered STN: 19900310
Last Updated on STN: 19900310

Entered Medline: 19740328

L53 ANSWER 76 OF 231 MEDLINE on STN
AN 72262631 MEDLINE
DN 72262631 PubMed ID: 4626561
TI Effect of vitamin E on the development of stress-produced gastric ulceration in the rat.
AU Kangas J A; Schmidt K M; Solomon G F
SO AMERICAN JOURNAL OF CLINICAL NUTRITION, (1972 Sep) 25 (9) 864-6. Journal code: 0376027. ISSN: 0002-9165.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 197210
ED Entered STN: 19900310
Last Updated on STN: 19900310
Entered Medline: 19721018

L53 ANSWER 77 OF 231 MEDLINE on STN
AN 73045558 MEDLINE
DN 73045558 PubMed ID: 4264070
TI Vitamin C therapy in geriatric practice.
AU Riccitelli M L
SO JOURNAL OF THE AMERICAN GERIATRICS SOCIETY, (1972 Jan) 20 (1) 34-42. Journal code: 7503062. ISSN: 0002-8614.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 197301
ED Entered STN: 19900310
Last Updated on STN: 19900310
Entered Medline: 19730130

L53 ANSWER 78 OF 231 MEDLINE on STN
AN 71285996 MEDLINE
DN 71285996 PubMed ID: 4328104
TI Stress and the domestic fowl: a physiological appraisal.
AU Freeman B M
SO WORLDS POULTRY SCIENCE JOURNAL, (1971 Jul-Sep) 27 (3) 263-75. Ref: 120 Journal code: 0033040. ISSN: 0043-9339.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LA English
FS Priority Journals
EM 197111
ED Entered STN: 19900101
Last Updated on STN: 19900101
Entered Medline: 19711109

L53 ANSWER 79 OF 231 MEDLINE on STN
AN 71028814 MEDLINE
DN 71028814 PubMed ID: 5529335
TI Muscular dystrophy in cattle suffering heavy mortalities during transport by sea.

AU Donaldson L E
SO AUSTRALIAN VETERINARY JOURNAL, (1970 Sep) 46 (9) 405-8.
Journal code: 0370616. ISSN: 0005-0423.
CY Australia
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 197012
ED Entered STN: 19900101
Last Updated on STN: 19900101
Entered Medline: 19701228

L53 ANSWER 80 OF 231 MEDLINE on STN
AN 72009573 MEDLINE
DN 72009573 PubMed ID: 5520304
TI Influence of ginseng on the stress mechanism.
AU Kim C; Kim C C; Kim M S; Hu C Y; Rhe J S
SO LLOYDIA, (1970 Mar) 33 (1) 43-8.
Journal code: 0376626. ISSN: 0024-5461.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 197112
ED Entered STN: 19900310
Last Updated on STN: 19900310
Entered Medline: 19711207

L53 ANSWER 81 OF 231 MEDLINE on STN
AN 70091490 MEDLINE
DN 70091490 PubMed ID: 5197874
TI [Effect of vitamin C on the ovaries and adrenal glands in stress states].
O dzialaniu witaminy C na jajniki i nadnercza w stanach sressowych.
AU Rokicki W
SO PATOLOGIA POLSKA, (1969 Oct-Dec) 20 (4) 455-9.
Journal code: 0404244. ISSN: 0031-3114.
CY Poland
DT Journal; Article; (JOURNAL ARTICLE)
LA Polish
FS Priority Journals
EM 197003
ED Entered STN: 19900101
Last Updated on STN: 19900101
Entered Medline: 19700306

L53 ANSWER 82 OF 231 MEDLINE on STN
AN 70013171 MEDLINE
DN 70013171 PubMed ID: 5346552
TI Vitamin E deficiency and fat stress in the dog.
AU Hayes K C; Nielsen S W; Rousseau J E Jr
SO JOURNAL OF NUTRITION, (1969 Oct) 99 (2) 196-209.
Journal code: 0404243. ISSN: 0022-3166.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 196912

ED Entered STN: 19900101
Last Updated on STN: 19980206
Entered Medline: 19691205

L53 ANSWER 83 OF 231 MEDLINE on STN
AN 69209341 MEDLINE
DN 69209341 PubMed ID: 4182286
TI [Experimental stress and supply of ascorbic acid].
Experimenteller Stress und Ascorbinsaurezufuhr.
AU Piroth M
SO VERHANDLUNGEN DER DEUTSCHEN GESELLSCHAFT FUR PATHOLOGIE, (1968) 52 478-80.
Journal code: 7503704. ISSN: 0070-4113.
CY GERMANY, WEST: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA German
FS Priority Journals
EM 196908
ED Entered STN: 19900101
Last Updated on STN: 19900101
Entered Medline: 19690803

L53 ANSWER 84 OF 231 MEDLINE on STN
AN 68127370 MEDLINE
DN 68127370 PubMed ID: 6080906
TI Acetyl-p-aminophenol and vitamin C in heat-stressed birds.
AU Subaschandran D V; Balloun S L
SO POULTRY SCIENCE, (1967 Sep) 46 (5) 1073-6.
Journal code: 0401150. ISSN: 0032-5791.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 196804
ED Entered STN: 19900101
Last Updated on STN: 19900101
Entered Medline: 19680406

L53 ANSWER 85 OF 231 MEDLINE on STN
AN 67085424 MEDLINE
DN 67085424 PubMed ID: 4289260
TI Impairment of the pituitary-adrenal response to acute stress in alloxan diabetes.
AU Kraus S D
SO ACTA ENDOCRINOLOGICA, (1967 Feb) 54 (2) 328-34.
Journal code: 0370312. ISSN: 0001-5598.
CY Denmark
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 196703
ED Entered STN: 19900101
Last Updated on STN: 19900101
Entered Medline: 19670328

L53 ANSWER 86 OF 231 MEDLINE on STN
AN 67056612 MEDLINE
DN 67056612 PubMed ID: 4288985

TI Pituitary-adrenal function in the absence of vasopressin.
AU McCann S M; Antunes-Rodrigues J; Nallar R; Valtin H
SO ENDOCRINOLOGY, (1966 Dec) 79 (6) 1058-64.
Journal code: 0375040. ISSN: 0013-7227.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 196703
ED Entered STN: 19900101
Last Updated on STN: 19900101
Entered Medline: 19670304

L53 ANSWER 87 OF 231 MEDLINE on STN
AN 68044003 MEDLINE
DN 68044003 PubMed ID: 4293594
TI [Therapy of sarcoidosis].
TTherapie der Sarkoidose.
AU Wurm K
SO ARCHIV FUR KLINISCHE UND EXPERIMENTELLE DERMATOLOGIE, (1966) 227 (1) 85-98. Ref: 16
Journal code: 1256765. ISSN: 0300-8614.
CY GERMANY, WEST: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LA German
FS Priority Journals
EM 196801
ED Entered STN: 19900101
Last Updated on STN: 19900101
Entered Medline: 19680112

L53 ANSWER 88 OF 231 MEDLINE on STN
AN 66096871 MEDLINE
DN 66096871 PubMed ID: 5898632
TI [Tests of some old sedatives and of phenacetin for anti-stress activity].
Prufung einiger alter Sedativa und des Phenacetins auf antistressorische Wirkungen.
AU Schulz-Baldes J G
SO ARZNEIMITTEL-FORSCHUNG, (1965 Aug) 15 (8) 835-7.
Journal code: 0372660. ISSN: 0004-4172.
CY GERMANY, WEST: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA German
FS Priority Journals
EM 196605
ED Entered STN: 19900101
Last Updated on STN: 19900101
Entered Medline: 19660522

L53 ANSWER 89 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 3
AN 1996:223831 HCAPLUS
DN 125:57042
TI Induction of NAD(P)H:quinone reductase by vitamins A, E and C in Colo205 colon cancer cells. [Erratum to document cited in CA124:85491]
AU Wang, Weiqun; Higuchi, Carl M.
CS Prevention and Control Program, Univ. Hawaii, Honolulu, HI, 96813, USA

SO Cancer Letters (Shannon, Ireland) (1996), 101(2), 265
CODEN: CALEDQ; ISSN: 0304-3835
PB Elsevier
DT Journal
LA English
AB The authors correct EC nos. on 2 enzymes. The errors were not reflected in the abstr. or the index entries.

L53 ANSWER 90 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:610256 HCAPLUS
DN 139:128009
TI Compositions for preventing human cancer and method of preventing human cancer
IN Nishino, Hoyoku; Jinno, Kenji
PA Kansai Technology Licensing Organization Co., Ltd., Japan
SO PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003063860	A1	20030807	WO 2002-JP9700	20020920

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI JP 2002-22958 A 20020131
AB Compns. contg. vitamin E compds. in addn. to carotenoid compds. It is favorable to take these compds. in such a manner as to have 1 to 100 mg/day of the carotenoid compd.(s) and 10 to 200 mg/day of the vitamin E compd.(s). In case of administering capsules each contg. 10 mg of natural lycopene, 6 mg of natural .beta.-carotene, 3 mg of natural .alpha.-carotene, and 1 mg of other natural carotenoids and .alpha.-tocopherol to patients with cirrhosis for 5 yr, the test group showed an incidence of liver cancer 1/3 times as high as the control group. Namely, it has been proved for the first time that these compns. are significantly efficacious in preventing liver cancer in humans.
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 91 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:466680 HCAPLUS
DN 139:30839
TI Composition for treatment of stress
IN Wurtman, Judith J.; Wurtman, Richard J.
PA Massachusetts Institute of Technology, USA
SO U.S., 11 pp., Cont.-in-part of U.S. Ser. No. 354,738, abandoned.
CODEN: USXXAM
DT Patent

LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6579899	B1	20030617	US 2000-492110	20000127
	WO 2001054681	A2	20010802	WO 2001-US2854	20010129
	WO 2001054681	C1	20020117		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1253915	A1	20021106	EP 2001-905173	20010129
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2003521498	T2	20030715	JP 2001-555659	20010129
PRAI	US 1998-93013P	P	19980716		
	US 1999-354738	B2	19990716		
	US 2000-492110	A2	20000127		
	WO 2001-US2854	W	20010129		

AB A method of treating stress in a patient showing stress related symptoms is disclosed, where the method comprises administering to the patient an effective amt. of a serotoninergic drug or prodrug. Specific examples of such drugs are described, and include, among others, tryptophan or 5-hydroxytryptophan, or their salts.
RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 92 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:33776 HCAPLUS
DN 138:49971
TI Antioxidant vitamins, zinc, and supplement factors for nucleic acid and protein synthesis for reducing surgery stress and promoting wound healing
IN Higashiguchi, Takashi; Kawaguchi, Susumu
PA Sankyo Seiyaku Kogyo Corporation, Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003012554	A2	20030115	JP 2001-192738	20010626
PRAI	JP 2001-192738		20010626		

AB Vitamins B1, B2 and B6, C, D3, and E, .beta.-carotene, niacin, pantothenic acid, cell growth promoters contg. folic acid, vitamin B12 and/or vitamin A, and nuclear acid and protein supplement factors contg. zinc and iron in liq. prepns. or juices are claimed for reducing surgery stress and promoting wound healing.

L53 ANSWER 93 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:40112 HCAPLUS
DN 138:72301

TI Protein-herb-based food composition offering stress relaxation to mammals
IN Fischer, Christa Maria; Weber, Regina Brigitte
PA The Procter & Gamble Company, USA
SO Eur. Pat. Appl., 8 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1275308	A1	20030115	EP 2001-117090	20010713
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	WO 2003005838	A1	20030123	WO 2002-US22028	20020711
	W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRAI EP 2001-117090 A 20010713
AB The present invention provides a food compn., preferably for use as a beverage or other liq. food, which delivers a stress-alleviating effect to mammals, esp., humans. The active ingredients of this compn. are protein fractions and herbal exts.
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 94 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:275268 HCAPLUS
DN 139:124
TI Possibility and application of antistress drugs for livestocks. 67. Right use of drugs for domestic animals and hygiene. III
AU Ono, Hiroomi
CS Nippon Veterinary Anim. Sci. Univ., Japan
SO Chikusan no Kenkyu (2003), 57(4), 527-532
CODEN: CKNKAJ; ISSN: 0009-3874
PB Yokendo
DT Journal; General Review
LA Japanese
AB A review. Rumen-bypass vitamin D3 (VD3) and activated VD3, vitamin C (VC) stabilizing prepns. and stabilized VC, and safety and instructions for use of vitamins were discussed.

L53 ANSWER 95 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:406227 HCAPLUS
DN 139:159294
TI The association of vitamins C and K3 kills cancer cells mainly by autoschizis, a novel form of cell death. Basis for their potential use as coadjuvants in anticancer therapy
AU Verrax, Julien; Cadrobbi, Julie; Delvaux, Marianne; Jamison, James M.; Gilloteaux, Jacques; Summers, Jack L.; Taper, Henryk S.; Buc Calderon,

Pedro
CS Departement des sciences pharmaceutiques, Nutrition et Toxicologie, Metabolisme, Unite de Pharmacocinetique, Universite Catholique de Louvain, Brussels, Belg.
SO European Journal of Medicinal Chemistry (2003), 38(5), 451-457
CODEN: EJMCA5; ISSN: 0223-5234
PB Elsevier Science Ltd.
DT Journal; **General Review**
LA English
AB A review. Deficiency of alk. and acid DNase is a hallmark in all non-necrotic cancer cells in animals and humans. These enzymes are reactivated at early stages of cancer cell death by vitamin C (acid DNase) and vitamin K3 (alk. DNase). Moreover, the coadministration of these vitamins (in a ratio of 100:1, for C and K3, resp.) produced selective cancer cell death. Detailed morphol. studies indicated that cell death is produced mainly by autoschizis, a new type of cancer cell death. Several mechanisms are involved in such a cell death induced by CK3, they included: formation of H2O2 during vitamins redox cycling, oxidative stress, DNA fragmentation, no caspase-3 activation, and cell membrane injury with progressive loss of organelle-free cytoplasm. Changes in the phosphorylation level of some crit. proteins leading to inactivation of NF-.kappa.B appear as main intracellular signal transduction pathways. The increase knowledge in the mechanisms underlying cancer cells death by CK3 may ameliorate the techniques of their in vivo administration. The aim is to prep. the introduction of the assocn. of vitamins C and K3 into human clinics as a new, non-toxic adjuvant cancer therapy.
RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 96 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:208749 HCAPLUS
DN 139:300975
TI The use of antioxidant therapies during chemotherapy
AU Drisko, Jeanne A.; Chapman, Julia; Hunter, Verda J.
CS School of Medicine, Department of Obstetrics and Gynecology, University of Kansas Medical Center, Kansas City, KS, 66160, USA
SO Gynecologic Oncology (2003), 88(3), 434-439
CODEN: GYNOA3; ISSN: 0090-8258
PB Elsevier Science
DT Journal; **General Review**
LA English
AB A review. Objective. At the present time, many cancer patients combine some form of complementary and alternative medicine therapies with their conventional therapies. The most common choice of these therapies is the use of antioxidants. Results. A review of four common antioxidants is undertaken, which includes vitamin E (mixed tocopherols and tocotrienols), .beta.-carotene (natural mixed carotenoids), vitamin C (ascorbic acid), and vitamin A (retinoic acid). Antioxidants act as electron acceptors as well as therapeutic biol. response modifiers. Despite the fact that chemotherapy-induced formation of free radicals is well-demonstrated, chemotherapy-induced cytotoxicity in general does not seem to depend on formation of reactive oxygen species. Conclusions. Currently, evidence is growing that antioxidants may provide some benefit when combined with certain types of chemotherapy. Because of the potential for pos. benefits, a randomized controlled trial evaluating the safety and efficacy of adding antioxidants to chemotherapy in newly diagnosed ovarian cancer is underway at the University of Kansas Medical Center.

RE.CNT 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 97 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:164494 HCAPLUS
DN 139:110895
TI Beneficial and adverse effects of chemopreventive agents
AU Lee, Byung Mu; Park, Kwang-Kyun
CS College of Pharmacy, Division of Toxicology, Sungkyunkwan University, Suwon, 440-746, S. Korea
SO Mutation Research (2003), 523-524, 265-278
CODEN: MUREAV; ISSN: 0027-5107
PB Elsevier Science B.V.
DT Journal; **General Review**
LA English
AB A review. The beneficial and adverse effects of some chemopreventive agents, such as Vitamins A, C, E, beta-carotene, indole-3-carbinol, capsaicin, garlic, and aloe are reviewed. Two large randomized trials with a lung cancer endpoint, the Alpha-Tocopherol, Beta-Carotene (ATBC) Prevention Study and the Beta-Carotene and Retinol Efficacy Trial (CARET), suggested that antioxidants might be harmful in smokers. However, the results of the Linxian study and of the ATBC or the CARET studies were significantly different in this respect, and therefore, the relationship between antioxidant and carcinogenesis remains open to debate. Indole-3-carbinol has cancer promoting activities in the colon, thyroid, pancreas, and liver, whereas capsaicin alters the metab. of chem. carcinogens and may promote carcinogenesis at high doses. Organosulfur compds. and selenium from garlic have no or a little enhancing effect on cancer promotion stage. Information upon chemopreventive mechanisms that inhibit carcinogenesis is imperfect, although the causes and natures of certain human cancers are known. Therefore, definitive preventive guidelines should be carefully offered for various types of tumors, which properly consider ethnic variations, and the efficacies and the safety of chemopreventive agents.
RE.CNT 137 THERE ARE 137 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 98 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:657299 HCAPLUS
DN 139:254596
TI Clinical models for testing chemopreventative agents in prostate cancer and overview of SELECT: The selenium and vitamin E cancer prevention trial
AU Klein, Eric A.
CS Section of Urologic Oncology, Urologic Institute, Cleveland Clinic Foundation, Cleveland, OH, 44195, USA
SO Recent Results in Cancer Research (2003), 163(Tumor Prevention and Genetics), 212-225
CODEN: RRCRBU; ISSN: 0080-0015
PB Springer-Verlag
DT Journal; **General Review**
LA English
AB A review. Target populations for chemoprevention trials should include those at higher than av. risk for the development of prostate cancer as defined by explicit epidemiol. and genetic criteria. Such populations include a "primary prevention" group without histol. or clin. evidence of cancer, and several clin. models of "secondary prevention," including those with clin. evident disease prior to definitive therapy and those at

high risk of recurrence after therapy based on histol. and/or biochem. status. Each risk group and clin. model has potential advantages and disadvantages, and the mechanisms which underlie disease development and progression in each group may be unique. These observations give rise to many potential clin. trials of specific agents. These trials should also include collection of data on potentially confounding influences on disease development and progression. Preclin., epidemiol., and Phase II data suggest that both selenium and vitamin E have potential efficacy in prostate cancer prevention. The experience of the Prostate Cancer Prevention Trial (PCPT) demonstrates the interest and dedication of healthy men to long-term studies of cancer prevention. SELECT, the Selenium and Vitamin E Cancer Prevention Trial, is an intergroup phase III, randomized, double-blind, placebo-controlled, population-based clin. trial designed to test the efficacy of selenium and vitamin E alone and in combination in the prevention of prostate cancer which builds on secondary analyses of large-scale chemoprevention trials for other cancers and the lessons of PCPT.

RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 99 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:341557 HCAPLUS
DN 139:78282
TI Chemoprevention of prostate cancer
AU Ward, John F.; Blute, Michael L.
CS Fellow in Urologic Oncology, Mayo Clinic, Rochester, MN, 55905, USA
SO Expert Review of Anticancer Therapy (2003), 3(2), 203-214
CODEN: ERATBJ; ISSN: 1473-7140
PB Future Drugs Ltd.
DT Journal; **General Review**
LA English
AB A review. Dietary factors and other naturally occurring substances may emerge as potent therapeutic or preventative agents in the baffle against prostate cancer. Much of the current support for these agents is epidemiol. based, but new prospective studies are now underway which may support their use in conventional medical practice.
RE.CNT 125 THERE ARE 125 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 100 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:471795 HCAPLUS
DN 139:374785
TI The effect of vitamin E on stress-induced changes in visual evoked potentials (VEPs) in rats exposed to different experimental stress models
AU Yargicoglu, Piraye; Yaras, Nazmi; Agar, Aysel; Guemueslue, Saadet; Bilmen, Suereyya; Oezkaya, Guel
CS Department of Biophysics, Faculty of Medicine, Akdeniz University, Arapsuyu, Turk.
SO Acta Ophthalmologica Scandinavica (2003), 81(2), 181-187
CODEN: AOSCFV; ISSN: 1395-3907
PB Blackwell Munksgaard
DT Journal
LA English
AB The aim of the study was to investigate the effects of vitamin E on stress-induced changes in visual evoked potentials (VEPs) and lipid peroxidn. Eight exptl. groups of 10 rats per group were formed. These consisted of the control group (C); the group treated with vitamin E (E);

groups exposed to cold stress (CS), immobilization stress (IS) and both cold and immobilization stress (CIS), and groups exposed to equiv. stresses and treated with vitamin E (CSE, ISE, CISE). Vitamin E was injected i.m. in a dose of 30 mg/kg/day. Following chronic stress (15 days), plasma corticosterone concns. in all exptl. groups were significantly increased over those in C group. Vitamin E significantly decreased corticosterone levels in all stress groups compared with their resp. control groups. Brain nitrite levels were significantly more elevated in all stress groups than in the C group. Vitamin E reduced retina and brain nitrite levels in all stress and E groups compared with their resp. control groups. Vitamin E decreased glutathione peroxidase (GSH-Px) activity in retina and brain tissues in the CSE group, but increased it in the ISE group compared with their resp. control groups. Lipid peroxidn. was increased in brain and retina tissues in all stress groups as indicated by the significant increase in thiobarbituric acid-reactive substance (TBARS) levels with respect to the C group. Vitamin E produced a significant decrease in brain and retina TBARS levels in all stress groups with respect to their corresponding control groups. The mean latencies of P1, N1, P2, N2 and P3 components were significantly prolonged in all stress groups compared with the C group. Vitamin E returned the VEP latencies in the stress groups to control values. Our findings clearly indicated that vitamin E has the potential to prevent VEP changes caused by stress.

RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 101 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:505982 HCAPLUS
DN 139:159336
TI Vitamin C in alternative cancer treatment: historical background
AU Block, Keith I.; Mead, Mark N.
CS Block Center for Integrative Cancer Care, Evanston, IL, USA
SO Integrative Cancer Therapies (2003), 2(2), 147-154
CODEN: ICTNAY; ISSN: 1534-7354
PB Sage Publications
DT Journal; **General Review**
LA English
AB A review. Ascorbic acid is the single-nutrient supplement most commonly used by cancer patients, although in most cases this takes place without the physician's knowledge or supervision. A comprehensive review of the literature is presented on the impact of ascorbic acid on cancer survival. Findings from 6 uncontrolled studies suggest that ascorbic acid may increase survival, whereas 2 controlled trials have yielded null results. The relative strengths and limitations of these studies are discussed. A turning point occurred with the release of the 2 controlled (null) studies, which influenced many physicians to turn away from nutrition in the care of cancer patients. Controversy about these trials still persists, however, in the alternative cancer community.

RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 102 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:18551 HCAPLUS
DN 138:49296
TI Cancer chemoprevention drug targets
AU Krishnan, K.; Campbell, S.; Abdel-Rahman, F.; Whaley, S.; Stone, W. L.
CS Medicine Service, James H. Quillen Veterans Affairs Medical Center and

Division of Hematology-Oncology, Department of Internal Medicine, East Tennessee State University, Johnson City, TN, 37614, USA
SO Current Drug Targets (2003), 4(1), 45-54
CODEN: CDTUAU; ISSN: 1389-4501
PB Bentham Science Publishers Ltd.
DT Journal; **General Review**
LA English
AB A review. Cancer chemoprevention is a new approach in the management of cancer. Traditional cytotoxic chemotherapeutic approaches cannot cure most advanced solid malignancies. Chemoprevention can be defined as the use of non-cytotoxic drugs and natural agents to block the progression to invasive cancer. Chemoprevention can either prevent DNA damage that initiates the neoplastic transformation process or reverses the progression of pre-invasive lesions. Epidemiol. observations, exptl. evidence from animal carcinogenesis models, knock-out models, cancer cell lines and clin. trials have shown the efficacy of this approach. Recent advances in our understanding of carcinogenesis have led to the synthesis of new drugs that target specific receptors. Non-steroidal anti-inflammatory drugs target the prostaglandin pathway. The identification of the role of cyclooxygenase-2 in epithelial carcinogenesis led to the synthesis of selective cyclooxygenase-2 inhibitors (Celecoxib). Celecoxib was subsequently approved for the prevention of colon polyps in familial adenomatous polyposis after the completion of a randomized clin. trial. The large chemoprevention clin. trial with the selective estrogen receptor modulator, tamoxifen, showed the benefit of tamoxifen in the prevention of breast cancer in high-risk women. Retinoids and rexinoids target the retinoid receptors and have a role in chemoprevention of aerodigestive, hepatic and cervical neoplasia. Selenium, an inhibitor of the glutathione peroxidase system, is being tested in the chemoprevention of prostate cancer and lung cancer. The different isoforms of vitamin E (tocopherols) may be chemopreventive. Recent evidence indicates that .gamma.-tocopherol may be a more powerful chemopreventive than the .alpha.-tocopherol. The review details the rationale, exptl. and clin. evidence and the drug targets of the chemopreventive agents that are currently in various phases of clin. development.
RE.CNT 145 THERE ARE 145 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 103 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:14030 HCAPLUS
DN 139:127185
TI Chemoprevention of prostate cancer by diet-derived antioxidant agents and hormonal manipulation (review)
AU Pathak, S. K.; Sharma, R. A.; Mellon, J. K.
CS Cancer Biomarkers and Prevention Group, Department of Oncology, University of Leicester, LE2 7LX, UK
SO International Journal of Oncology (2003), 22(1), 5-13
CODEN: IJONES; ISSN: 1019-6439
PB International Journal of Oncology
DT Journal; **General Review**
LA English
AB A review. Cancer of the prostate is the most commonly diagnosed solid malignancy and the second leading cause of cancer-related death in men living in developed countries. With an ageing population, the no. of men living with early stages of prostate cancer is expected to increase. There is an increasing need to prevent the onset of cancer or delay the

progression of carcinogenesis in this organ. Chemoprevention is the administration of pharmacol. agents to prevent, delay or reverse carcinogenesis. An example is the reversal of high grade intraepithelial neoplasia by hormonal manipulation using anti-estrogens in breast carcinogenesis or anti-androgens in prostate carcinogenesis. Epidemiol. data showing ethnic and geog. variations in the incidence of, and mortality from, prostate cancer have suggested that the consumption of certain dietary factors, particularly anti-oxidants, may be protective. These factors include the vitamins D and E, soy, lycopene and selenium. The administration of 5-.alpha. reductase inhibitors to patients with benign prostatic hyperplasia may also constitute a potentially chemopreventive intervention. The efficacy of chemopreventive agents needs to be investigated in randomized, placebo-controlled trials in suitable cohorts of high-risk individuals. In parallel, reliable assays of potential biomarkers of the efficacy of intervention need to be developed and validated rigorously.

RE.CNT 95 THERE ARE 95 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 104 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:384304 HCAPLUS
DN 140:22438
TI Evolving strategies for prostate cancer chemoprevention trials
AU Lieberman, Ronald
CS Division of Cancer Prevention, National Cancer Institute, Rockville, MD, 20852, USA
SO World Journal of Urology (2003), 21(1), 3-8
CODEN: WJURDJ; ISSN: 0724-4983
PB Springer-Verlag
DT Journal; **General Review**
LA English
AB A review. Prostate cancer chemoprevention (CP) can be defined as the use of natural and synthetic agents that inhibit, reverse or regress pre-cancer and delay progression to invasive cancer. During the past two decades several CP strategies have evolved. The first generation of CP trials tested the efficacy of antioxidants and vitamins including .beta.-carotene, vitamin A, retinol, 13-cis retinoic acid, vitamins E, C and selenium. Although these trials were disappointing, provocative hypotheses were generated for selenium and vitamin E that set the stage for future prostate trials. In the 1990s, the NCI launched a second generation of large CP trials aimed at breast and prostate cancer. One of these trials is the PCPT, testing the efficacy of a 5 alpha-reductase inhibitor, finasteride, to prevent prostate cancer in 18,000 men. Although PCPT is still in progress, the NCI recently launched a second large primary prostate CP trial called SELECT, testing the efficacy of selenium and vitamin E in 32,400 men. The Prostate Cancer Progress Report to the Director of NCI in 1998 challenged the research community to design more efficient CP trials for prostate cancer. In response, the NCI has evolved a third generation of CP trials. This involves pharmacol. driven translational science research including agents and their targets, biomarker endpoints, suitable clin. models for testing agents and efficient trial designs employing high risk cohorts and surrogate endpoints. In summary, a dual strategy for CP is being developed which includes public health measures and a medical intervention approach.

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 105 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:675772 HCAPLUS
DN 137:195546
TI Treatment of HIV and viral diseases, vascular disease and cancer using a COX-2 inhibitor and cystine
IN Kindness, George; Schumm, Brooke, III; Guilford, Timothy F.
PA Probiochem, LLC, USA
SO PCT Int. Appl., 70 pp.
CODEN: PIXXD2
DT Patent
LA English

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002067853 A2		20020906	WO 2002-US2480	20020126

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR

PRAI US 2000-PV238504 20001006
US 2000-PV238506 20001006
US 2000-PV243901 20001027
US 2000-PV243902 20001027
US 2000-PV245592 20001117
US 2001-PV264511 20010126
US 2001-PV264504 20010126
US 2001-PV307689 20010725
US 2001-912703 20010725
WO 2001-US31328 20011006
US 2001-997490 20011117

AB The invention discloses the combination of a selective COX-2 inhibitor and cystine for the treatment of anti-viral diseases, including HIV, immuno-compromised individuals, AIDS and hepatitis C, atherosclerosis and related atherosclerosis vascular disease states, coronary ischemic syndrome, thrombosis, related vascular problems, cancer and to alleviate 5-hydroxy tryptamine- mediated mechanisms by at least relieving inflammatory symptoms, through regulation of cytokine activated responses, including migraine and migraine-like conditions, to ameliorate neurodegenerative diseases aggravated by inflammatory condition and carotidynia. An HMG-CoA reductase inhibitor may be added to enhance the combination. Magnesium sulfate or similar compd. is proposed to be added to enhance the treatment of neurodegenerative conditions.

L53 ANSWER 106 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:315070 HCAPLUS
DN 136:324080
TI Methods and compositions for promoting the maturation of monocytes
IN Hellstrand, Kristoffer; Hermodsson, Svante H.; Gehlsen, Kurt R.
PA Maxim Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 20 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002033050	A2	20020425	WO 2001-US42626	20011010
	WO 2002033050	A3	20020822		
	WO 2002033050	C1	20031120		
	W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2002094323	A1	20020718	US 2001-974410	20011009
	AU 2002030399	A5	20020429	AU 2002-30399	20011010
	EP 1326629	A2	20030716	EP 2001-987794	20011010
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	US 2002182174	A1	20021205	US 2002-160360	20020530
	US 2002182175	A1	20021205	US 2002-160368	20020530
	US 2002182176	A1	20021205	US 2002-160745	20020530
	US 2002182177	A1	20021205	US 2002-161160	20020530
PRAI	US 2000-240299P	P	20001012		
	US 2001-974410	A3	20011009		
	WO 2001-US42626	W	20011010		

AB Disclosed is a method of promoting the maturation of monocytes comprising the administration of a reactive oxygen species (ROS) inhibitor or scavenger and at least one monocyte maturation-promoting agent. A compn. for promoting the maturation of monocytes is likewise disclosed. The pharmaceutical compn. includes a compd. effective to promote the maturation of monocytes and a ROS inhibitor or scavenger combined in a pharmaceutically acceptable carrier.

L53 ANSWER 107 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:71884 HCAPLUS
DN 136:112639
TI Nutraceutical natural product composition for cancer treatment
IN Clayton, Paul Rodney; Rooperai, Harcharan; Dexter, David
PA Forum Bioscience, UK
SO PCT Int. Appl., 15 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002005827	A2	20020124	WO 2001-GB3150	20010718
	WO 2002005827	A3	20020718		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,				

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI GB 2000-17620 A 20000718
GB 2000-23574 A 20000926
GB 2000-26600 A 20001031

AB A program of micronutrients designed specifically to modify all the known steps in the cancer sequence comprises administering an effective amt. of one or more flavonoids, one or more lectins, one or more isoflavones, one or more carotenoids, betaine and selenium to a mammal suffering from cancer as a combination therapy in which the components are administered together, concurrently or sequentially.

L53 ANSWER 108 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:869587 HCAPLUS
DN 137:346169
TI Combination and method of treatment of cancer utilizing a COX-2 inhibitor and an HMG-CoA inhibitor and cystine to enhance glutathione
IN Kindness, George; Schumm, Brooke; Guilford, F. Timothy
PA USA
SO U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S. Pat. Appl. 2002 86,894.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 5

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002169195	A1	20021114	US 2002-57511	20020126
US 2002086894	A1	20020704	US 2001-912703	20010725
US 6534540	B2	20030318		
WO 2002028270	A2	20020411	WO 2001-US31328	20011006
WO 2002028270	A3	20020613		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, US, US, US, US, US, US, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2001-264511P P 20010126
US 2001-307689P P 20010725
US 2001-912703 A2 20010725
WO 2001-US31328 W 20011006
US 2000-238504P P 20001006
US 2000-238506P P 20001006
US 2000-243901P P 20001027
US 2000-243902P P 20001027
US 2000-245592P P 20001117
US 2001-263486P P 20010123

AB The inventors propose a combination of an HMG-CoA reductase inhibitor (also referred to as "HMG-CoA inhibitor(s)"), and COX-2 inhibitor for the treatment of cancer, esp. prostate cancer, and a method of treatment of cancer by that combination, esp. prostate cancer. The inventors propose a combination of an HMG-CoA reductase inhibitor, COX-2 inhibitor, and

glutathione pathway enhancing and detoxifying compd., particularly cystine, for the treatment of cancer, esp. prostate cancer, and a method of treatment of cancer by that combination, esp. prostate cancer. Also contemplated is the addn. of lipoic acid and compds. to maintain adequate levels of selenium, Vitamin C and Vitamin E. Based on the clin. results of retardation, but not cure of cancer, the combination has the characteristic of sufficiently interfering with replication and apparently restoring the immune system capacity to manage cancer. A patient with stage 4 metastatic prostate cancer was treated with Vioxx and Mevacor.

L53 ANSWER 109 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:522424 HCAPLUS
DN 137:73248
TI Therapeutic modulation of the tumor inflammatory response
IN Roussel, Eugene
PA USA
SO U.S. Pat. Appl. Publ., 12 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2002090353	A1	20020711	US 2001-756978	20010109
WO 2002055024	A2	20020718	WO 2002-US749	20020109
WO 2002055024	A3	20030227		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1355660	A2	20031029	EP 2002-720778	20020109

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRAI US 2001-756978	A	20010109	
WO 2002-US749	W	20020109	

AB The invention relates to compns., kits, and methods for alleviating cancer (i.e., a tumor) in a human patient. The therapeutic modality effected by the invention involves inducing a type 1 inflammatory response in the tumor tissue, whereby the tumor tissue is diminished or destroyed and the patient develops immune memory that inhibits or prevents recurrence of the tumor.

L53 ANSWER 110 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:814178 HCAPLUS
DN 137:334031
TI Novel stress protein NSP with chaperone activity isolated from chinook salmon, its expression in animal cells under external stress and therapeutical uses thereof
IN Park, Jeong Woo; Cho, Wha Ja; Yoon, Won Joon; Chung, Dae Kyun; Lee, Jung Min; Jang, Soo Jin
PA RNA Inc., S. Korea
SO PCT Int. Appl., 113 pp.

CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002083725	A1	20021024	WO 2001-KR2139	20011211

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI KR 2001-17129 A 20010331

AB The present invention is directed to protein NSP having chaperone activity whose expression level increases in cells of an animal subjected to external stresses, and to a process for producing said protein NSP. Addnl., the present invention is directed to nucleic acid mols. encoding such protein NSP, recombinant vectors comprising said nucleic acid mols., host cells transformed with such recombinant vectors, antibodies against such protein NSP, and pharmaceutical or diagnostic compns. and vaccines contg. said protein NSP, vectors or antibodies for preventing or treating or diagnosing infectious diseases of animals. Further, the present invention is directed to inhibitors of activity or expression of such protein NSP, and to a method for screening said inhibitors. Furthermore, the present invention is directed to a protein array including such protein NSP and a solid support.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 111 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:793442 HCAPLUS
DN 137:289032
TI Zinc ionophores as anti-stress agents
IN Fliss, Henry
PA Can.
SO PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002080943	A1	20021017	WO 2002-CA458	20020404

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2002183300	A1	20021205	US 2002-116535	20020404

EP 1377300 A1 20040107 EP 2002-713971 20020404
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
PRAI US 2001-281490P P 20010404
WO 2002-CA458 W 20020404
AB The present invention provides methods comprising one or more zinc ionophores for treating or reversing the effects of stress, including surgical stress in patients. Test compds. effective in screening for ionophore and anti-stress activity include Zn complexes with pyrithione and diethyldithiocarbamate.
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 112 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:889935 HCAPLUS
DN 138:348214
TI Potential therapeutic application of the association of vitamins C and K3 in cancer treatment
AU Buc Calderon, P.; Cadrobbi, J.; Marques, C.; Hong-Ngoc, N.; Jamison, J. M.; Gilloteaux, J.; Summers, J. L.; Taper, H. S.
CS Faculte de Medecine, Unite de Pharmaceocinetique, Metabolisme, Nutrition et Toxicologie, Universite Catholique de Louvain, Brussels, Belg.
SO Current Medicinal Chemistry (2002), 9(24), 2271-2285
CODEN: CMCHE7; ISSN: 0929-8673
PB Bentham Science Publishers
DT Journal; **General Review**
LA English
AB A review. The decision of stressed cells to die or to survive is made by integrating signals at different levels through multiple check points. However, initiation and continued progression toward cell death by apoptosis in cancer cells may be blocked by mutation of the tumor suppressor p53 or overexpression of members of the bcl-2 family of proteins. The existence of such mechanisms indicates that cancer cells lose the controls regulating their cell cycle. Therefore, the activation of their programmed cell death appears as a major therapeutic target. Oxidative stress can stimulate growth, trigger apoptosis, or cause necrosis depending upon the dose and the exposure time of the oxidizing agent. A large body of evidence supports the idea that oxidative stress induced by redox cycling of vitamins C and K3 in assocn. surpasses cancer cellular defense systems and results in cell death. The mol. mechanisms underlying such a process are, however, still unknown. Indeed, several types of cell death may be produced, namely autoschizis, apoptosis and necrosis. Combined vitamin C and K3 administration in vitro and in vivo produced tumor growth inhibition and increased the life-span of tumor-bearing mice. CK3-treatment selectively potentiated tumor chemotherapy, produced sensitization of tumors resistant to some drugs, potentiated cancer radiotherapy and caused inhibition of the development of cancer metastases without inducing toxicity in the host. We propose the assocn. of vitamins C and K3 as an adjuvant cancer therapy which may be introduced into human cancer therapy without any change in the classical anticancer protocols, and without any supplementary risk for patients.
RE.CNT 90 THERE ARE 90 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 113 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:581613 HCAPLUS

DN 138:215228
TI Preconditioning with millimolar concentrations of vitamin C or N-acetylcysteine protects L6 muscle cells' insulin-stimulated viability and DNA synthesis under oxidative stress
AU Orzechowski, Arkadiusz; Lokociejewska, Malgorzata; Muras, Patrycja; Hocquette, Jean-Francois
CS Faculty of Veterinary Medicine, Department of Physiological Sciences, Warsaw Agricultural University, Warsaw, 02-787, Pol.
SO Life Sciences (2002), 71(15), 1793-1808
CODEN: LIFSAK; ISSN: 0024-3205
PB Elsevier Science Inc.
DT Journal
LA English
AB The effect of reactive O/N species (ROS/RNS) (H2O2, superoxide anion radical O2.bul.- and OH radical .bul.rOH--the reaction products of the hypoxanthine/xanthine oxidase system), (NO.bul. from sodium nitroprusside), and peroxynitrite (ONOO- from 3-morpholinosydnonimine) on the mitogenic effect of insulin was studied in rat L6 muscle cells after one day incubation with/or without antioxidants. ROS/RNS inhibited insulin-induced mitogenicity (DNA synthesis). Insulin (0.1 .mu.M), however, markedly improved mitogenicity in the muscle cells treated with high concns. (0.1, 0.5, 1 mM) of donors of H2O2, O2.bul.-, .bul.OH, ONOO- and NO.bul.. Cell viability, as assessed by morphol. criteria, was also monitored. Massive apoptosis was induced by 1-mM concns. of donors of H2O2 and ONOO-, while NO.bul. addnl. induced necrotic cell death. These results showed that ROS/RNS provide a good explanation for developing resistance to the growth-promoting activity of insulin in myoblasts under conditions of oxidative or nitrosative stress. Cell viability showed that none of the donors induced cell death when present at <0.5 mM. In order to confirm the deleterious effects of ROS/RNS prior to the subsequent treatment with ROS/RNS plus insulin, 1-day preincubation with selected antioxidants (sodium ascorbate, (0.01, 0.1, 1 mM) or N-acetylcysteine (0.1, 1, 10 mM)) was carried out. At low concns. (micromolar), these antioxidants did not abrogate (and even worsened) the concn.-dependent effects of ROS/RNS. In contrast, pretreatment with millimolar concns. of ascorbate or acetylcysteine maintained an elevated mitogenicity in response to insulin, irresp. of the ROS/RNS donor type used.
RE.CNT 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 114 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:404155 HCAPLUS
DN 137:214400
TI Autoschizis: a novel cell death
AU Jamison, James M.; Gilloteaux, Jacques; Taper, Henryk S.; Calderon, Pedro Buc; Summers, Jack L.
CS Department of Urology, Summa Health System/Northeastern Ohio Universities College of Medicine, Akron, OH, USA
SO Biochemical Pharmacology (2002), 63(10), 1773-1783
CODEN: BCPCA6; ISSN: 0006-2952
PB Elsevier Science Inc.
DT Journal; **General Review**
LA English
AB A review. Vitamin C (VC) and vitamin K3 (VK3) administered in a VC:VK3 ratio of 100:1 exhibit synergistic antitumor activity and preferentially kill tumor cells by autoschizis, a novel type of necrosis characterized by exaggerated membrane damage and progressive loss of organelle-free

cytoplasm through a series of self-excisions. During this process, the nucleus becomes smaller, cell size decreases one-half to one-third of its original size, and most organelles surround an intact nucleus in a narrow rim of cytoplasm. While the mitochondria are condensed, tumor cell death does not result from ATP depletion. However, vitamin treatment induces a G1/S block, diminishes DNA synthesis, increases H2O2 prodn., and decreases cellular thiol levels. These effects can be prevented by the addn. of catalase to scavenge the H2O2. There is a concurrent 8- to 10-fold increase in intracellular Ca2+ levels. Electrophoretic anal. of DNA reveals degrdn. due to the caspase-3-independent reactivation of DNase I and II (DNase I, DNase II). Redox cycling of the vitamins is believed to increase oxidative stress until it surpasses the reducing ability of cellular thiols and induces Ca2+ release, which triggers activation of Ca2+-dependent DNase and leads to degrdn. of DNA. Recent expts. indicate that oral VC:VK3 increases the life-span of tumor-bearing nude mice and significantly reduces the growth rate of solid tumors without any significant toxicity by reactivating DNase I and II and inducing autoschizis. This report discusses the mechanisms of action employed by these vitamins to induce tumor-specific death by autoschizis.

RE.CNT 69 THERE ARE 69 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 115 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:909631 HCAPLUS
DN 139:52105
TI Possibility and application of antistress drugs for livestock. 63. Right use of drugs for domestic animals and hygiene. III
AU Ono, Hiroomi
CS Nippon Veterinary Animal Sci., Japan
SO Chikusan no Kenkyu (2002), 56(12), 1329-1334
CODEN: CKNKAJ; ISSN: 0009-3874
PB Yokendo
DT Journal; General Review
LA Japanese
AB A review as a part of a continued review on changes in serum corticosterone levels and the ratio of H/L (pseudo-eosinophils/lymphocyte) in chickens taking starvation stress. Summarized tables on vitamin C as an antistress drug for cow, beef cattle, pig, broiler, and hen are shown.

L53 ANSWER 116 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:465295 HCAPLUS
DN 138:11058
TI .alpha.-Tocopheryl succinate epitomizes a compound with a shift in biological activity due to pro-vitamin-to-vitamin conversion
AU Neuzil, Jiri
CS Faculty of Health Sciences, Division of Pathology II, University of Linkoping, Linkoping, Swed.
SO Biochemical and Biophysical Research Communications (2002), 293(5), 1309-1313
CODEN: BBRCA9; ISSN: 0006-291X
PB Elsevier Science
DT Journal; **General Review**
LA English
AB A review. With the advent of the third millennium, a no. of pathologies have been eradicated or taken under control. However, the incidences, of cancer and atherosclerosis, the two most common causes of death in developed countries, have increased or, in some instances, only stagnated.

Therefore there has been an intensive search for agents effective against such life-threatening conditions. Accordingly, the potential anti-atherogenic activity of vitamin E analogs has been studied extensively. Interestingly, recent reports strongly suggest that certain vitamin E analogs, represented in particular by .alpha.-tocopheryl succinate (.alpha.-TOS), also possess anti-neoplastic activity. In this communication, we review our current understanding of the mol. basis for these double effects of .alpha.-TOS and propose a testable hypothesis, according to which this semi-synthetic analog exerts both anti-atherogenic and anti-neoplastic activities. We propose that the prevalence of each activity depends on the actual form of the vitamin E analog. That is, the conversion of the pro-vitamin E form, .alpha.-TOS, to the corresponding vitamin form, .alpha.-tocopherol, makes this anti-neoplastic agent active against inflammatory diseases like atherosclerosis.

RE.CNT 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 117 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:664047 HCAPLUS
DN 137:272577
TI Possibility and application of antistress drugs for limestocks. 59. Right use of drugs for domestic animals and hygiene. III
AU Ono, Hiroomi
CS Nippon Veterinary Animal Sci. Univ., Japan
SO Chikusan no Kenkyu (2002), 56(8), 899-902
CODEN: CKNKAJ; ISSN: 0009-3874
PB Yokendo
DT Journal; General Review
LA Japanese
AB A review. A part of a continued review on vitamin C as antistress drug for chicken. Effect of heat stress to chicken who were exposed to hot air on their plasma components, metabolites of adrenal gland, body wt. changes, and mortality, and suppressive effect of vitamin C on heat stress are discussed.

L53 ANSWER 118 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:581722 HCAPLUS
DN 137:179215
TI Possibility and application of antistress drugs for livestocks. 58. Right use of drugs for domestic animals and hygiene. III
AU Ono, Hiroomi
CS Nippon Veterinary Animal Sci. Univ., Japan
SO Chikusan no Kenkyu (2002), 56(7), 821-824
CODEN: CKNKAJ; ISSN: 0009-3874
PB Yokendo
DT Journal; General Review
LA Japanese
AB A review. Antagonistic effect of vitamin C (VC) on stress in domestic fowls and chickens, alleviating effect of VC on fear due to capture and restriction for a short time, effects of VC on adrenocortical response to capture and restriction for a short time, behavior in the uninitiated circumstances, and tonic immobility in middle-aged chickens, and effect of VC on body wt. at the time of cargo booking of old chickens were discussed.

L53 ANSWER 119 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:542153 HCAPLUS

DN 137:149583
TI Possibility and application of antistress drugs for livestocks. 57. Right use of drugs for domestic animals and hygiene. III
AU Ono, Hiroomi
CS Nippon Veterinary Animal Sci. Univ., Japan
SO Chikusan no Kenkyu (2002), 56(6), 723-726
CODEN: CKNKAJ; ISSN: 0009-3874
PB Yokendo
DT Journal; General Review
LA Japanese
AB A review. Vitamin C (VC) as an antistress drug in young piglets, correlation between body wt. gain of fatted piglets in heat stress and blood VC concn., cellular immune activating action of VC in piglets with VC deficient constitution, and effect of VC supplemented to feed on productivity in piglets after weaning stress were discussed.

L53 ANSWER 120 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:421835 HCAPLUS
DN 137:27624
TI Possibility and application of anti-stress drugs for livestocks. 56. Right use of drugs for domestic animals and hygiene. III
AU Ono, Hiroomi
CS Dep. Veterinary Hygiene, Nippon Veterinary Animal Sci. Univ., Japan
SO Chikusan no Kenkyu (2002), 56(5), 603-606
CODEN: CKNKAJ; ISSN: 0009-3874
PB Yokendo
DT Journal; General Review
LA Japanese
AB A review. Effects of vitamin C on plasma Ig levels, incidence of the disease, and survival rate in calves given and not given beesting were discussed.

L53 ANSWER 121 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:401830 HCAPLUS
DN 137:139761
TI Possibility and application of antistress drugs for livestock. 55. Right use of drugs for domestic animals and hygiene. III
AU Ono, Hiroomi
CS Department of Veterinary Hygiene, Nippon Veterinary and Animal Science University, Japan
SO Chikusan no Kenkyu (2002), 56(4), 491-493
CODEN: CKNKAJ; ISSN: 0009-3874
PB Yokendo
DT Journal; General Review
LA Japanese
AB A review. Effect of vitamin C on the activities of antistress for chicken, dairy cattle, and pig, effect of vitamin C on enhancement of immunol. functions in weanling piglet, and supply of vitamin C to piglet at initiation of lactation, who has disorder of vitamin C biosynthesis are discussed.

L53 ANSWER 122 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:838964 HCAPLUS
DN 138:395857
TI Potentiation of the effect of paclitaxel and carboplatin by antioxidant mixture on human lung cancer H520 cells
AU Pathak, Ashutosh K.; Singh, Neeta; Khanna, Neeru; Reddy, Vijay G.; Prasad,

Kedar N.; Kochupillai, Vinod
CS Departments of Medical Oncology, Institute Rotary Cancer Hospital, All India Institute of Medical Sciences, New Delhi, India
SO Journal of the American College of Nutrition (2002), 21(5), 416-421
CODEN: JONUDL; ISSN: 0731-5724
PB American College of Nutrition
DT Journal
LA English
AB Objective: Antioxidants have been shown to enhance the effect of certain chemotherapeutic agents on tumor cells in culture. However, this effect differs depending upon the type of tumor and the drugs. In this study, the objective was to see whether pretreatment with antioxidant mixt. could enhance the cytotoxic and apoptotic effect of commonly used chemotherapeutic agents, paclitaxel and carboplatin for the treatment of NSCLC. Methods: Human lung squamous cell carcinoma cell line, H520, was treated with antioxidant mixt. (vitamin C, vitamin E and .beta.-carotene), paclitaxel and carboplatin, individually and in combination of different doses in different sequences. Growth inhibition and induction of apoptosis was studied by morphol. changes, MTT assay and flow-cytometric anal. Results: The antioxidant mixt. by itself led to 15% apoptosis in H520 cells. Paclitaxel treatment 24 h prior to carboplatin caused 54% apoptosis, more than that produced by simultaneous treatment with both agents (40%). A statistically significant improvement in the degree of apoptosis, induced by paclitaxel and carboplatin combination, was seen when the cells were pretreated with antioxidant mixt. immediately before paclitaxel exposure (70%) or 24 h before paclitaxel exposure (89%). Conclusion: The data suggests that the apoptotic effects of paclitaxel and carboplatin are enhanced by pretreatment with the antioxidant mixt. Thus, the most promising sequence of these agents, which emerged in this study, was pretreatment with antioxidant mixt. for 24 h followed by paclitaxel treatment for 24 h followed by carboplatin exposure for 24 h.
RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 123 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:913017 HCAPLUS
DN 139:223342
TI Chemoprevention of lung cancer: current status and future prospects
AU Cohen, Victor; Khuri, Fadlo R.
CS Departments of Bioimmunotherapy and Thoracic/Head and Neck Medical Oncology, The University of Texas M.D. Anderson Cancer Center, Houston, TX, USA
SO Cancer and Metastasis Reviews (2002), 21(3-4), 349-362
CODEN: CMRED4; ISSN: 0167-7659
PB Kluwer Academic Publishers
DT Journal; **General Review**
LA English
AB A review. Lung cancer is the leading cause of cancer death in the United States. The current mainstays of lung cancer therapy are surgery, radiation and chemotherapy. These interventions have produced slight declines in mortality rates in the last 5 yr; however, it appears unlikely that marked improvements will occur in the near future. This grim overview argues strongly for new, emerging approaches for controlling this disease. Chemoprevention is the use of specific natural or synthetic substances with the objective of reversing, suppressing or preventing carcinogenic progression to invasive cancer. Whether primary, secondary or tertiary settings, prevention has the highest potential to improve the

dismal statistics assocd. with this cancer. Several randomized clin. or translational chemoprevention trials have been conducted. All have so far produced either neutral or harmful primary endpoint results showing that lung cancer was not prevented by .alpha.-tocopherol, .beta.-carotene, retinal, retinyl palmitate, N-acetylcysteine or isotretinoin in smokers. Secondary results supporting treatment with isotretinoin in never- and former-smokers and data from prevention trials involving selenium and vitamin E however, are encouraging and offer a promising direction for future clin. study. Other areas of promise for future lung cancer chemoprevention study include the study of mol. markers of risk and drug activity, mol. targeting study, improved imaging techniques and new drug delivery systems.

RE.CNT 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 124 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:913008 HCAPLUS
DN 139:223338
TI Micronutrients in cancer chemoprevention
AU Greenwald, Peter; Milner, John A.; Anderson, Darrell E.; McDonald, Sharon S.
CS Division of Cancer Prevention, Natl. Cancer Inst., National Institutes of Health, USA
SO Cancer and Metastasis Reviews (2002), 21(3-4), 217-230
CODEN: CMRED4; ISSN: 0167-7659
PB Kluwer Academic Publishers
DT Journal; **General Review**
LA English
AB A review. The selection of micronutrients, defined as essential and non-essential dietary components consumed in minute quantities, for testing in clin. chemoprevention trials is based on the totality of evidence arising from epidemiol., in vitro, animal, and clin. studies. Those micronutrients that surface with chemopreventive potential, in terms of high efficacy and low toxicity, in early-phase clin. studies are then candidates for large-scale, randomized clin. chemoprevention trials with cancer endpoints. Micronutrients currently being examd. in National Cancer Institute (NCI)-sponsored phase I, II, or III chemoprevention trials for prostate, breast, and colon cancers include isoflavones, lycopene, selenized yeast, selenomethionine, selenium, vitamin E, perillyl alc., folic acid, vitamin D, calcium, and curcumin. The response to micronutrients may vary not only in magnitude but also in direction. This variation and response likely depend on individual genetic polymorphisms and/or interactions among dietary components that influence absorption, metab., or site of action. Research priorities include investigation of possible mol. targets for micronutrients and whether genetic and epigenetic events dictate direction and magnitude of the response.

RE.CNT 128 THERE ARE 128 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 125 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:281653 HCAPLUS
DN 139:390382
TI Chemoprevention of carcinoma prostate. A review
AU Ansari, M. S.; Gupta, N. P.; Hemal, A. K.
CS Department of Urology, All India Institute of Medical Sciences, New Delhi, 110029, India
SO International Urology and Nephrology (2002), 34(2), 207-214

CODEN: IURNAE; ISSN: 0301-1623
PB Kluwer Academic Publishers
DT Journal; **General Review**
LA English
AB A review. Purpose: Chemoprevention of prostate cancer is the administration of agents to prevent, inhibit, or delay progression of prostate cancer. Opportunities exist for testing various types of chemopreventive intervention. Material and methods: The authors reviewed the relevant articles published in the last twenty years and studied the biol. of the prostate cancer. An attempt is made to identify intermediate markers and surrogate endpoint markers. The various interventions and initial clin. trial results are described. End points for evaluation are mainly based on changes in PSA, changes of histol. precursors, or time of onset of clin. disease. Results: Nutritional factors such as reduced fat intake, vitamin A, vitamin E, vitamin C, vitamin D, Lycopene and selenium may have a protective effect against prostate cancer. Conclusion: Numerous studies implicate dietary and nutritional factors in the onset and progression of prostate cancer. Hence, it is possible that bioactive compds. (anti-oxidants) like vitamins. A, C, D, E, minerals like selenium and carotenoids like lycopene can be a part of chemopreventive strategies for prostate cancer. Ongoing studies on nutrition and prostate cancer may bring the required evidence to support what is still only a hypothesis at present. However, abs. recommendation will have to await the results of long term prospective clin. trials.
RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 126 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:913006 HCAPLUS
DN 139:223336
TI Cancer chemoprevention
AU Kucuk, Omer
CS Barbara Ann Karmanos Cancer Institute, Wayne State University, Detroit, MI, USA
SO Cancer and Metastasis Reviews (2002), 21(3-4), 189-197
CODEN: CMRED4; ISSN: 0167-7659
PB Kluwer Academic Publishers
DT Journal; **General Review**
LA English
AB A review. Chemoprevention means prevention of cancer by administering chem. compds. Ideal chemopreventive agents are non-toxic, inexpensive and can be taken orally. A large no. of natural and synthetic compds. have cancer preventive properties in cell culture or animal model studies. With the demonstration of tamoxifen's ability to prevent breast cancer in women, the feasibility of chemoprevention in humans has now been firmly established. The current challenge is to build on this success and identify non-toxic chemopreventive agents. A promising area of research is clin. studies with botanicals, cancer preventive compds. in fruits, vegetables and other plants.
RE.CNT 89 THERE ARE 89 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 127 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:355154 HCAPLUS
DN 137:362230
TI Vitamin E analogs: A new class of multiple action agents with anti-neoplastic and anti-atherogenic activity

AU Neuzil, J.; Kagedal, K.; Andera, L.; Weber, C.; Brunk, U. T.
CS Division of Pathology II, University Hospital, Linkoping, SE-58185, Swed.
SO Apoptosis (2002), 7(2), 179-187
CODEN: APOPFN; ISSN: 1360-8185
PB Kluwer Academic Publishers
DT Journal; **General Review**
LA English
AB A review. The incidence of cancer and atherosclerosis, two most common causes of death in developed countries, has been stagnating or, even, increasing. Drugs effective against such conditions are needed and, in this regard, the potential anti-atherosclerotic activity of vitamin E analogs has been studied extensively. Surprisingly, recent results indicate that these agents may also exert anti-neoplastic effects. Here we review the evidence that particular analogs of vitamin E may act as both anti-atherogenic and anti-cancer agents, and discuss the possible mol. bases for these actions.
RE.CNT 67 THERE ARE 67 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 128 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:514120 HCAPLUS
DN 140:12891
TI The protection of vitamin E on LTP in hippocampal dentate gyrus of rats under stress
AU Hong, Yan; Cheng, Yiyong; Ma, Qiang; Wang, Donglan; Li, Shutian
CS Institute of Health and Environmental Medicine, Academy of Military Medical Sciences, Tianjin, 300050, Peop. Rep. China
SO Zhongguo Yingyong Shenglixue Zazhi (2002), 18(2), 142-144
CODEN: ZYSZE2; ISSN: 1000-6834
PB Zhongguo Yingyong Shenglixue Zazhi Bianjibu
DT Journal
LA Chinese
AB The effects of vitamin E on stress-induced impairment in the hippocampus was studied in rats. Twenty four male Wistar rats were randomly allocated into four groups: control, stress, control+VE, stress+VE. The rat stress model was built by restraining for 6 h/d, 21 d. The long-term potentiation was induced in rat hippocampal dentate gyrus (DG) by high-frequency test stimulation. Compared with control group, the rats suffered from restraint stress showed that the no. of crossing in openfield test and the content of glucocorticoids in plasma were significantly increased, and the changes of amplitude of population spike (PS) were significantly lower. After VE supplementation in stressed rats, the indexes mentioned above were significantly improved. The results suggested that opportune supplementation of vitamin E might improve the brain function under stress.

L53 ANSWER 129 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:285235 HCAPLUS
DN 137:139857
TI Effect of some health food materials and vitamin C on the stressed rats
AU Nishikawa, Yoshiyuki
CS College of Nutrition, Koshien University, Takarazuka, Japan
SO Koshien Daigaku Kiyo, A: Eiyogakubu-hen (2002), Volume Date 2001, 29, 23-33
CODEN: KDKAEH; ISSN: 0913-5537
PB Koshien Daigaku
DT Journal

LA English
AB The preventive effects for the evolution of gastric ulcers and liver dysfunction on stressed rats induced by water immersion were studied giving some health food materials (Fagopyrum tataricum, honey contained wasp exts., Jew's marrow, bittern, glutathione, taurine, Sesamum lignan and corb shell ext.) and vitamin C to rats. Jew's marrow, bittern, taurine and corb shell ext. had more preventive effect for the evolution of gastric ulcers than any other food materials. For the prevention of liver dysfunction, Jew's marrow or taurine was appreciably effective as shown by the low values of the serum enzyme activities of ALT (alanine amino transferase), AST (aspartic acid amino transferase) and GGT (.gamma.-glutamyl transferase). The results showed that simultaneously supplied health foods of corb shell ext. and vitamin C depress most effectively the occurrence of gastric ulcers under the stressed conditions of rats.
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 130 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:617820 HCAPLUS
DN 135:175361
TI Treatment or prevention of prostate cancer with a COX-2 selective inhibiting drug
IN Waldstreicher, Joanne; Morrison, Briggs W.
PA Merck & Co., Inc., USA
SO PCT Int. Appl., 12 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001060365	A1	20010823	WO 2001-US4655	20010213
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1259237	A1	20021127	EP 2001-910637	20010213
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2003522790	T2	20030729	JP 2001-559462	20010213
	US 2001041713	A1	20011115	US 2001-784878	20010216
PRAI	US 2000-183204P	P	20000217		
	WO 2001-US4655	W	20010213		

AB A COX-2 selective inhibiting drug is disclosed as useful in treating or preventing prostate cancer. The compd. is used alone or in combination with other drugs.
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 131 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:564830 HCAPLUS

DN 135:132427
TI Treatment or prevention of prostate cancer with a COX-2 selective inhibiting drug
IN Waldstreicher, Joanne; Morrison, Briggs W.
PA Merck & Co., Inc., USA
SO PCT Int. Appl., 11 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001054688	A1	20010802	WO 2001-US2405	20010125
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1253921	A1	20021106	EP 2001-908690	20010125
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	US 2001047022	A1	20011129	US 2001-771315	20010126
	US 6486204	B2	20021126		
PRAI	US 2000-178722P	P	20000128		
	WO 2001-US2405	W	20010125		

AB A COX-2 selective inhibiting drug is disclosed as useful in treating or preventing prostate cancer. The compd. is used alone or in combination with other drugs.
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 132 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:760465 HCAPLUS
DN 137:231809
TI Anticancer grape beverage
IN Zhang, Yongming
PA Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 6 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1327823	A	20011226	CN 2000-130724	20001011
PRAI	CN 2000-130724		20001011		

AB The title beverage contains vesveratrol-contg. grape 60-80, polyphenol, tea pigment, tannin acid, Cordycep polyose, ganoderma polyoses, ginsenoside, etc. 15-30, trace elements and vitamins 1-5%. The product is low in cost.

L53 ANSWER 133 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:564823 HCAPLUS

DN 135:132455
TI Composition for treatment of stress
IN Wurtman, Judith J.; Wurtman, Richard J.
PA Massachusetts Institute of Technology, USA
SO PCT Int. Appl., 35 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001054681	A2	20010802	WO 2001-US2854	20010129
	WO 2001054681	C1	20020117		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6579899	B1	20030617	US 2000-492110	20000127
	EP 1253915	A1	20021106	EP 2001-905173	20010129
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2003521498	T2	20030715	JP 2001-555659	20010129
PRAI	US 2000-492110	A2	20000127		
	US 1998-93013P	P	19980716		
	US 1999-354738	B2	19990716		
	WO 2001-US2854	W	20010129		

AB A method of treating stress in a patient showing stress related symptoms is disclosed, where the method comprises administering to the patient an effective amt. of a serotoninergic drug or prodrug. Specific examples of such drugs are described, and include, among others, tryptophan or 5-hydroxytryptophan, or their salts.

L53 ANSWER 134 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:480709 HCAPLUS
DN 135:51113
TI Product and method to reduce stress induced immune suppression
IN DeMichele, Stephen J.; McEwen, John W.; Wood, Steven M.
PA Abbott Laboratories, USA
SO U.S., 25 pp., Cont.-in-part of U.S. 6,130,244.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6255341	B1	20010703	US 1999-267557	19990312
	US 6130244	A	20001010	US 1998-28987	19980225
	US 6444700	B1	20020903	US 2001-812107	20010319
PRAI	US 1998-28987	A2	19980225		
	US 1999-267557	A1	19990312		

AB In its broadest aspect, the present invention is directed to the discovery of immunonutritional products that are useful in reducing the immunol.

system suppression that results from stress. The stress may be in the form of phys. exertion, mental exhaustion, disease states and the like. In one embodiment, the invention relates to a base nutritional compn. comprising a structured glyceride component, an antioxidant system (vitamins C and E, .beta.-carotene and Se) and a protein. This nutritional compn. has been shown to be highly effective in reducing immune system down regulation or dysregulation as a result of stress.
RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 135 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:241888 HCAPLUS
DN 134:216724
TI Inhibition of cancer metastasis using provitamin C. Reducing intracellular oxidative stress which participates in cancer invasion
AU Nagao, Norio; Liu, Jian Wen; Miwa, Nobuhiko
CS Sch. Bioresour., Hiroshima Prefect. Univ., Japan
SO Kagaku to Seibutsu (2001), 39(3), 151-153
CODEN: KASEAA; ISSN: 0453-073X
PB Gakkai Shuppan Senta
DT Journal; **General Review**
LA Japanese
AB A review with 9 refs., on prevention of tumor metastasis using provitamin C through inhibition of oxidative stress.

L53 ANSWER 136 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:772042 HCAPLUS
DN 136:112291
TI Chemotherapy-induced chromosomal damage in peripheral blood lymphocytes of cancer patients supplemented with antioxidants or placebo
AU Elsendoorn, T. J.; Weijl, N. I.; Mithoe, S.; Zwinderman, A. H.; Van Dam, F.; De Zwart, F. A.; Tates, A. D.; Osanto, S.
CS Department of Clinical Oncology, Leiden University Medical Centre, Leiden, Neth.
SO Mutation Research (2001), 498(1-2), 145-158
CODEN: MUREAV; ISSN: 0027-5107
PB Elsevier Science B.V.
DT Journal
LA English
AB Patients with various types of cancer were treated with cisplatin-based combination chemotherapy. Some received supplementation treatment with a beverage contg. the antioxidants vitamins C and E, plus Se, during chemotherapy. The antioxidant mixt. was administered to investigate whether it could reduce the potential genotoxic and nephrotoxic effect of the chemotherapy. A placebo group received a beverage without Se or antioxidants. Micronuclei (MN) in cytochalasin B-blocked binucleate (BN) peripheral blood lymphocytes (PBLs) and hypoxanthine phosphoribosyltransferase (HPRT) mutants in PBLs were studied before, during and after chemotherapy as a measure for chemotherapy-induced genotoxic effects. Before chemotherapy, the patients' mean frequencies of MN and HPRT mutants did not differ from those in a group of healthy subjects. The mean frequency of MN in patients increased after one cycle of chemotherapy. This frequency was still elevated 2 mo after the completion of chemotherapy (not significantly). There was no significant difference in MN frequency between the antioxidant-treated and placebo group of patients. Chemotherapy-induced frequencies of MN after three cycles of chemotherapy correlated with the cumulative dose of cisplatin

and the cisplatin-mediated loss of renal function. No consistent change in HPRT mutant frequency following chemotherapy was obsd. in the placebo and antioxidant groups of patients. In conclusion, cisplatin combination chemotherapy resulted in a cisplatin-dose-related increase of the frequency of chromosomal damage. Supplementation with antioxidants did not prevent or reduce this effect.
RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 137 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:553425 HCAPLUS
DN 133:144907
TI Brassica extracts or sulforaphane in combination with resveratrol as antitumor agents
IN Raymond, Sidney Matthews
PA Wassen International Limited, UK
SO PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000045829	A1	20000810	WO 2000-GB300	20000202
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	GB 2346325	A1	20000809	GB 1999-2304	19990202
	GB 2363571	A1	20020102	GB 2001-18267	20000202
PRAI	GB 1999-2304	A	19990202		
	WO 2000-GB300	W	20000202		

AB The present invention discloses a compn. suitable for pharmaceutical use which comprises at least one active ingredient from a Brassica ext. or an analog of sulforaphane, and resveratrol or an analog thereof. The compn. is esp. effective for the treatment of testicular tumors.
RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 138 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:666594 HCAPLUS
DN 133:251654
TI Agents and methods for promoting production gains in animals
IN Cook, Christian John
PA The Horticulture and Food Research Institute of New Zealand Limited, N. Z.
SO PCT Int. Appl., 59 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI WO 2000054766 A1 20000921 WO 2000-NZ26 20000313
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
NZ 334627 A 20020726 NZ 1999-334627 19990312
EP 1169030 A1 20020109 EP 2000-911506 20000313
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
PRAI NZ 1999-334627 A 19990312
WO 2000-NZ26 W 20000313
AB The invention relates to compns. and methods for promoting prodn. gains in animals, and for enhancing the efficacy of therapeutic agents. The gains are achieved through redn. in stress, including through the use of antistress agents. Compns. comprising therapeutic agents such as anthelmintics, and antistress agents are provided. Thus, stressed sheep receiving metyrapone (5 mg/kg live wt.) at the time of anthelmintic treatment (Ivomec pour on, oral Endex, and injectable levamisole) showed the same efficacy of anthelmintics as did sheep in non-stressed groups; similar growth rates were also obsd.
RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 139 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:781922 HCAPLUS
DN 136:36897
TI Method of prophylaxis and correction of transport stress in cattle
IN Gorlov, I. F.; Levakhin, V. I.; Ezergail, K. V.
PA Volgogradskii Nauchno-Issledovatel'skii Tekhnol. Inst. Myaso-Molochnogo Skotovodstva i Pererabotki Produktsii Zhivotnovodstva, Russia
SO Russ., No pp. given
CODEN: RUXXE7
DT Patent
LA Russian
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI RU 2153802	C1	20000810	RU 1999-108918	19990505
PRAI RU 1999-108918		19990505		

AB The method involves feeding to animals a supplement contg.: bischofite 78.75-80.85, ascorbic acid (vitamin C) 0.15-0.25, and glucose 19-21 wt.%. This supplement is fed 4-5 days before transport at 210-230 mg/kg live wt./24 h in feed conc. The method ensures stabilization of metab. in transport stress increases and improves meat quality.

L53 ANSWER 140 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:715552 HCAPLUS
DN 133:276335
TI Fat and oil-encapsulated vitamin C oral preparations as immunostimulants and prevention of stress for domestic animals
IN Naruse, Haruki; Sawa, Akira
PA Kyokuto International Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000281575	A2	20001010	JP 1999-120307	19990325

PRAI JP 1999-120307 19990325

AB Fat and oil encapsulated vitamin C oral prepns. contg. 5-50 g/animal/day, chromium yeast 1-20 g/animal/day, and sugar honey 10-500 g/animal/day are claimed as immunostimulants and prevention of stress, influenza, and infectious diseases for domestic animals, including cow. Formulation examples were given.

L53 ANSWER 141 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:454817 HCAPLUS
DN 133:344030
TI Prostate cancer prevention trials in the USA
AU Brawley, O. W.; Parnes, H.
CS National Cancer Institute, Bethesda, MD, 20852, USA
SO European Journal of Cancer (2000), 36(10), 1312-1315
CODEN: EJCAEL; ISSN: 0959-8049
PB Elsevier Science Ltd.
DT Journal; **General Review**
LA English
AB A review with 32 refs. There is dramatic international variation in prostate cancer mortality rates. The variation suggests that the disease has an environmental cause and encourages the search for a way to prevent it. Androgenic stimulation over a period of time, perhaps due to a high fat diet, has been suggested as a cause of prostate cancer. The corollary to this hypothesis is that lowering androgenic stimulation over time will prevent prostate cancer. 5-Alpha-reductase inhibition through drugs like finasteride have been shown to decrease androgenic stimulation of the prostate. A clin. trial is underway using finasteride to assess this hypothesis. Epidemiol. and lab. studies also suggest that those with high selenium and vitamin E intake have a lower risk of prostate cancer. Recent serendipitous findings of two randomized clin. trials support this. A study to assess these compds. is currently being designed. Other promising but less developed interventions in the chemoprevention of prostate cancer include vitamin D supplementation and diet modification.
RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 142 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:154540 HCAPLUS
DN 135:152058
TI A double-blind, placebo-controlled, double-center study of the effects of an oral multivitamin-mineral combination on stress
AU Schlebusch, L.; Bosch, B. A.; Polglase, G.; Kleinschmidt, I.; Pillay, B. J.; Cassimjee, M. H.
CS Dep. Medically Psychology, Nelson R. Mandella School Medicine, University of Natal, Durban, S. Afr.
SO SAMJ (2000), 90(12), 1216-1223
CODEN: SAMJEJ; ISSN: 0256-9574
PB SA Medical Association Health and Medical Publishing
DT Journal

LA English
AB Objectives: To assess the effects of mulivitamin-mineral combination (Berocca Calmag) treatment on stress in a large sample of South Africans. Method: This was a multiple-dose, double-blind, placebo-controlled, double-center study. Patients were drawn from two centers with high stress levels (Durban and Johannesburg) each study recruiting the same no. of patients (150) from 1000 adults with predetd. high stress levels. Dropouts from the study were replaced. Study medication safety was evaluated by recording adverse events. On day 1 (baseline) patients were subjected to an individual in-depth assessment that included a biog. questionnaire, for psychol. scales, and collateral information from close relatives. On day 30 (end of the study period) or at the lates 7 days after the last planned medication intake, the assessment was repeated for purposes of pre- and post-response comparison. Results: Thirty-three patients dropped out and were replaced, leaving 300 patients who completed the study - 151 in group 1 (multivitamin-mineral combination), and 149 in group 2 (placebo). There were no statistically significant differences between the two groups regarding demographics and baseline stress scores at study entry. Both groups improved between baseline and the end of treatment assessed. The degree of improvement was statistically significant and greatest in group 1 for all psychometric instruments, with this beneficial effect increasing over the course of the day. Subgroup analyses for age (18-44 and 45-65 yr), gender and ethnicity showed no general effect on the overall study outcome. Conclusions: The multivitamin-mineral combination tested is well tolerated and can be used as part of a treatment program for stress-related symptoms at the recommended dose.
RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 143 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:657253 HCAPLUS
DN 134:146792
TI Reevaluation of ascorbate in cancer treatment: Emerging evidence, open minds and serendipity
AU Padayatty, Sebastian J.; Levine, Mark
CS Molecular and Clinical Nutrition Section, National Institutes of Health, Bethesda, MD, USA
SO Journal of the American College of Nutrition (2000), 19(4), 423-425
CODEN: JONUDL; ISSN: 0731-5724
PB American College of Nutrition
DT Journal; **General Review**
LA English
AB A review with 26 refs. Some clinicians and alternative therapy practitioners advocate mega dose i.v. and oral ascorbate treatment of cancer. Randomized control studies using oral ascorbate showed no benefit. Recent data show that i.v. but not oral administration of ascorbate can produce millimolar plasma concns., which are toxic to many cancer cell lines. We propose that ascorbate treatment of cancer should be reexamd. by rigorous scientific scrutiny in the light of new evidence.
RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 144 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:285559 HCAPLUS
DN 133:134594
TI Selenium and cancer: some nutritional aspects

AU Alaejos, M. S.; Diaz Romero, F. J.; Diaz Romero, C.
CS Dep. Analytical Chem., Nutrition and Food Sciences, Dep. Phys. Med. Pharmacol., University of La Laguna, La Laguna, Tenerife, Spain
SO Nutrition (New York) (2000), 16(5), 376-383
CODEN: NUTRER; ISSN: 0899-9007
PB Elsevier Science Inc.
DT Journal; **General Review**
LA English
AB A review with 30 refs. The level of selenium in cancer patients is lower than that in control subjects. However, low selenium levels in body fluids can be due to the malnutrition obsd. in these patients. There is evidence from epidemiol. studies that high dietary selenium intakes and high selenium status in people are assocd. with lower cancer mortality. However, contradictory information has been found in some prospective studies. The presence of other nutrients in selenium-rich foods can influence the role of the selenium in cancer etiol. Therefore, there are selenium antagonistic elements that inhibit the anticarcinogenic effects of selenium and other antioxidant micronutrients such as ascorbic acid, retinol, .beta.-carotene, .alpha.-tocopherol, and some other elements have a synergistic effect on the prevention of cancer.
RE.CNT 102 THERE ARE 102 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 145 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:785041 HCAPLUS
DN 135:267536
TI Melatonin protects against stress-induced gastric lesions by scavenging the hydrocyl radical. [Erratum to document cited in CA133:344934]
AU Bandyopadhyay, Debashis; Biswas, Kausik; Bandyopadhyay, Uday; Reiter, Russel J.; Banerjee, Ranajit K.
CS Department of Physiology, Indian Institute of Chemical Biology, Calcutta, 700032, India
SO Journal of Pineal Research (2000), 29(4), 248
CODEN: JPRSE9; ISSN: 0742-3098
PB Munksgaard International Publishers Ltd.
DT Journal
LA English
AB The cor. Table 4 (page 147) is given.

L53 ANSWER 146 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:740807 HCAPLUS
DN 133:344934
TI Melatonin protects against stress-induced gastric lesions by scavenging the hydroxyl radical
AU Bandyopadhyay, Debashis; Biswas, Kausik; Bandyopadhyay, Uday; Reiter, Russel J.; Banerjee, Ranajit K.
CS Department of Physiology, Indian Institute of Chemical Biology, Calcutta, 700032, India
SO Journal of Pineal Research (2000), 29(3), 143-151
CODEN: JPRSE9; ISSN: 0742-3098
PB Munksgaard International Publishers Ltd.
DT Journal
LA English
AB The antiulcer effect of melatonin on gastric lesions caused by restraint-cold stress or by indomethacin (IMN) was studied with the intent of detg. the mechanism of action of the indole. Melatonin dose-dependently prevents both stress and IMN-induced gastric damage with

around 90% inhibition at a dose of 60 mg per kg BW. When compared with already-marketed antiulcer drugs, such as ranitidine and omeprazole, melatonin was found to be more effective than ranitidine but less effective than omeprazole in preventing stress ulcer. When compared with other antioxidants, melatonin was more potent than glutathione and essentially equipotent to .alpha.-tocopherol in blocking stress-induced ulcer. As stress-induced gastric lesions are mainly caused by oxidative damage due to hydroxyl radicals (OH), the effect of melatonin in scavenging the OH generated during stress conditions, as well as in an in vitro model system, was studied. The results indicate that melatonin at the dose of 60 mg per kg BW caused an 88% redn. of endogenous OH during stress. Melatonin was also highly effective in scavenging OH generated in vitro by a Cu2+-ascorbate system. In this case, melatonin at 100 .mu.M reduced OH by 80%. Melatonin was also found to be a more potent radical scavenger than benzoate, a known OH scavenger. The results indicate that melatonin prevents stress-induced gastric lesions by scavenging the endogenous OH. As it also protects against IMN-induced gastric damage, it probably also offers gastroprotection by maintaining endogenous prostaglandin levels.

RE.CNT 66 THERE ARE 66 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 147 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:94439 HCAPLUS
DN 132:151019
TI The influence of stress on eyeball lipid peroxide formation and vitamin C content
AU Watanabe, Tomiko; Sugimoto, Kayo; Satoh, Kazue; Asano, Kazuhito; Ushio, Fusao; Hisamitsu, Tadashi
CS Dep. Physiol., Sch. Med., Showa Univ., 1-5-8 Hatanodai, Shinagawa-ku, Tokyo, 142-8555, Japan
SO Atarashii Ganka (2000), 17(1), 117-120
CODEN: ATGAEX; ISSN: 0910-1810
PB Medikaru Ai Shuppan
DT Journal
LA Japanese
AB The influence of stress on eyeball lipid peroxide formation and vitamin C content were examd. using BALB/c mice stressed by water-immersion restraint. The stress caused significant increase in lipid peroxide generation, the lipid peroxide levels in eyeballs from donor non-stressed mice (0.569 .+-. 0.038 nM) increasing to 0.940 .+-. 0.023 nM when the mice were subjected to water-immersion restraint stress for 8 h at 25.degree.. In contrast, water-immersion restraint stress significantly decreased eyeball vitamin C content. These two biochem. parameters were normalized by pre-treatment with ascorbic acid. These results may suggest that water-immersion restraint stress decreases vitamin C content and increases lipid peroxide levels in eyeballs.

L53 ANSWER 148 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:23774 HCAPLUS
DN 134:192742
TI Antioxidant loading reduces oxidative stress induced by high-energy impulse noise (blast) exposure
AU Elsayed, N. M.; Armstrong, K. L.; William, M. T.; Cooper, M. F.
CS Walter Reed Army Institute of Research, Washington, DC, USA
SO Toxicology (2000), 155(1-3), 91-99
CODEN: TXCYAC; ISSN: 0300-483X

PB Elsevier Science Ireland Ltd.
DT Journal
LA English
AB Detonation of explosives, firing of large caliber weapons and occupational explosions, professional or accidental, produce high-energy impulse noise (blast) waves characterized by a rapid rise in atm. pressure (overpressure) followed by gradual decay to ambient level. Exposure to blast waves causes injury, predominantly to the hollow organs such as ears and lungs. We have previously reported that blast exposure can induce free radical-mediated oxidative stress in the lung characterized by antioxidant depletion, lipid peroxidn., and Hb oxidn. In this study, we examd. whether pre-loading, adequately fed rats, with pharmacol. doses of antioxidants would reduce the response to blast. Sprague-Dawley rats weighing 300-350 g were loaded with either 800 IU vitamin E (VE), 1000 mg vitamin C (VC) or 25 mg lipoic acid (LA) for 3 consecutive days by gavage before exposure to blast. Both VE, and LA were dissolved in 2 mL corn oil, but VC in 2 mL water. After the 3-day antioxidant loading, the rats were divided into six groups (five rats per group), deeply anesthetized with sodium pentobarbital (60 mg/kg body wt.), then exposed to a low-level blast (62.+-.2 kPa peak pressure and 5 ms duration). A matched no. of groups were sham exposed and served as controls. One hour after exposure, all rats were euthanized then blood, and lung tissue was analyzed. We found that antioxidant loading resulted in restored Hb oxygenation, and reduced lipid peroxidn. Lung tissue VE content was elevated after loading but VC did not change possibly due to their different bioavailability and satn. kinetics. These observations, suggest that brief antioxidant loading with pharmacol. doses can reduce blast-induced oxidative stress, and may have occupational and clin. implications.
RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 149 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:550244 HCAPLUS
DN 138:100238
TI Chemoprevention against free radical-mediated hepatocarcinogenesis in rats
AU Nakae, Dai; Kishida, Hideki; Kusuoka, Osamu; Andoh, Nobuaki; Denda, Ayumi; Konishi, Yoichi
CS Department of Oncological Pathology, Cancer Center, Nara Medical University, Japan
SO Furi Rajikaru no Rinsho (2000), 15, 13-18
CODEN: FRRIFI
PB Nihon Igakukan
DT Journal; **General Review**
LA Japanese
AB A review. Hepatocellular carcinoma (HCC) is a common and lethal human cancer esp. in Eastern countries. Because of its poor prognosis, it is deeply demanded to prevent and control the development of HCC. Free radicals have been indicated to play roles in the mechanisms underlying hepatocarcinogenesis, which leads the possibility of chemoprevention by regulating oxidative (and/or nitros-ative) stress. To explore such a possibility, we have been investigating effects of various chems. on free radical-mediated hepatocarcinogenesis in rats fed a choline-deficient, L-amino acid-defined (CDAA) diet. Chronic feeding of the CDAA diet induces putatively preneoplastic liver lesions and promotes them into HCC under the background induction of fatty liver, hepatocyte death and proliferation, and fibrosis resulting in cirrhosis. Oxidative injuries on nuclear DNA and extranuclear components of hepatocytes contribute to the

induction and growth of preneoplastic lesions, resp., in assocn. with a variety of signaling abnormalities. Vitamin C and E derivs., antioxidants, retinoids, nonsteroidal anti-inflammatory drugs and a nitrone-based radical trapper have been shown to chemo-prevent hepatocarcinogenesis in rats fed the CDAA diet by virtue of inhibiting the induction of oxidative sub-hepatocellular injuries, signaling abnormalities and/or background liver lesions. These results give useful basic information that can contribute to develop the practical, mechanism-based strategies for the chemoprevention against human HCC.

L53 ANSWER 150 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:330547 HCAPLUS
DN 130:357181
TI Antitumor drug containing bromelain
IN Reuter, Klaus
PA Germany
SO Ger. Offen., 4 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 19750328	A1	19990520	DE 1997-19750328	19971113
PRAI DE 1997-19750328		19971113		

AB A combination of bromelain with either (a) ascorbic acid and/or vitamin E or (b) silicic acid and/or acetylsalicylic acid is effective in treatment of tumors, esp. hormone-responsive tumors such as breast cancer and testicular cancer, and is relatively free of side effects. The individual components of the compn. are ineffective. A suitable individual dose contained 1000 mg ascorbic acid, 0.6 g silicic acid, and 1 g bromelain. The recommended daily dose is 2-5 g bromelain.

L53 ANSWER 151 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:565876 HCAPLUS
DN 131:175093
TI Product and method to reduce stress induced immune suppression
IN Demichele, Stephen J.; Wood, Steven M.; McEwen, John William
PA Abbott Laboratories, USA
SO PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9943220	A1	19990902	WO 1999-US4021	19990224
W: CA, JP, MX, NO				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6130244	A	20001010	US 1998-28987	19980225
CA 2321909	AA	19990902	CA 1999-2321909	19990224
EP 1056359	A1	20001206	EP 1999-936019	19990224
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE				
JP 2002504501	T2	20020212	JP 2000-533028	19990224
NO 2000004191	A	20001024	NO 2000-4191	20000822
PRAI US 1998-28987	A	19980225		

WO 1999-US4021 W 19990224

AB In its broadest aspect, the present invention is directed to the discovery of immunonutritional products that are useful in reducing the immunol. system suppression that results from stress. The stress may be in the form of phys. exertion, mental exhaustion, disease states and the like. In one embodiment, the invention relates to a nutritional compn. comprising a structured glyceride component and an antioxidant system. This nutritional compn. has been shown to be highly effective in reducing immune system down regulation or dysregulation as a result of stress.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 152 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:184095 HCAPLUS
DN 130:209116
TI Compositions containing electrolytes for relief of heat stress
IN Armonti, Fausto; Mitola, Donato; Samson, Jacobus C.
PA All Sun - HSF Company Limited, Ire.
SO PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9911149	A1	19990311	WO 1998-EP5422	19980826
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 9892653	A1	19990322	AU 1998-92653	19980826
	EP 1006815	A1	20000614	EP 1998-945290	19980826
	EP 1006815	B1	20020703		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, MC, PT, IE, SI, FI				
	JP 2001514022	T2	20010911	JP 2000-508265	19980826
	AT 219892	E	20020715	AT 1998-945290	19980826
	ES 2178257	T3	20021216	ES 1998-945290	19980826
	US 2002102313	A1	20020801	US 2002-74847	20020213
PRAI	US 1997-924858	A	19970830		
	WO 1998-EP5422	W	19980826		
	US 2000-486494	B1	20000517		

AB A compn. for the relief of heat stress, particularly for restoration of electrolyte balance due to passive exposure to heat resulting in excessive transpiration/perspiration, without strenuous phys. activity, comprises predetd. levels of selected electrolytes including, Na ion .ltoreq. 250, K ion .gtoreq. 100, Mg ion .gtoreq. 100 parts, and carbohydrates .ltoreq. 2.5 %, as needed for organoleptic purposes only. The compn. can further include Zn .gtoreq. 30, Mn .gtoreq. 10, and Ca 65-400 parts. Furthermore, the compn. can comprise oligoelements, dermoprotective vitamins and antioxidants so as to compensate for the chem. changes which might occur in the skin of a person passively exposed to heat. The compn. is preferably in the form of a powder, solid, water soln., or frozen state.

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 153 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:81579 HCAPLUS
DN 130:144186
TI Mineral and vitamin combinations for the treatment of stress and allergies
IN Piper, Edwina Margaret
PA UK
SO PCT Int. Appl., 18 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9903482	A1	19990128	WO 1998-GB2128	19980717
	W: AU, CA, GB, NZ, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9884500	A1	19990210	AU 1998-84500	19980717
	GB 2342045	A1	20000405	GB 2000-878	19980717
	GB 2342045	B2	20020417		
	US 6299886	B1	20011009	US 2000-462990	20000425
PRAI	GB 1997-15203	A	19970719		
	WO 1998-GB2128	W	19980717		

AB Pharmaceutical compn. contg. mineral and vitamin combinations are used for the treatment of stress and allergies. The treatment is by means of nutritional supplements for the adrenal glands, liver and mast cells. The supplements may include potassium, magnesium, Vit B6, Vit B5, Vit C and essential fatty acids. A biol. mechanism linking stress and allergies such as hay fever or other perennial or seasonal respiratory allergies is proposed and the effect of the treatment thereon is discussed. A compn. contained potassium gluconate 408, evening primrose oil 500, vitamin C 530, bioflavonoids 25, magnesium oxide 134, vitamin B6 50, vitamin B5 50, vitamin B1 5, vitamin B2 5, bioavailable zinc 8, bioavailable manganese 2 mg., bioavailable selenium 25, and bioavailable chromium 25 .mu.g. Treatment of patients with the compn. for 4 days eliminated all allergic symptoms.
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 154 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:191402 HCAPLUS
DN 130:213663
TI DHEA-containing nutritional supplement
IN Craft, John C.
PA USA
SO U.S., 11 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5883086	A	19990316	US 1997-850850	19970502
PRAI	US 1997-850850		19970502		

AB The present invention relates to a nutritional supplement contg. from 5%

to 2000% each of the RDA of vitamins A, C, D, E and .beta.-carotene, from 5% to 500% of the RDA of the minerals selenium, zinc, magnesium, calcium, iodine and potassium, from 5 to 100 mg dehydroepiandrosterone (DHEA), from 0.1-10 mg trans-ferulic acid, and one or more plant exts. selected from ginseng and garlic. These DHEA-contg. nutritional supplements are useful in the alleviation of an irregular heartbeat as well as the general symptoms of stress.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 155 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:789591 HCAPLUS
DN 132:32926
TI A method for evaluating the influence of stress on epidermal cells
IN Hosoi, Junichi; Tsuchiya, Toru; Koyama, Junichi
PA Shiseido Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 11341993	A2	19991214	JP 1998-326832	19981117
PRAI JP 1998-101920		19980331		

AB An in vitro method is developed for evaluating the effect of stress load on epidermal cells, and for screening a substance capable of suppressing skin damage due to the stress load. In this system, epidermal cells are cultured in the presence of glucocorticoid which brings about lowering the function of skin cells, and the resulting drop in the amt. of MHC class II antigen expressed is immunol. measured. The suppressing effect of a test substance on this drop in the amt. of MHC class II antigen expressed is evaluated as a relief for the influence of the stress load on the epidermal cells. Ougon ext. and vitamin C derivs. were found to possess this ability. A skin prepn. contg. such a substance is also claimed.

L53 ANSWER 156 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:764865 HCAPLUS
DN 132:278532
TI Vitamin and mineral supplement use is associated with reduced risk of prostate cancer
AU Kristal, Alan R.; Stanford, Janet L.; Cohen, Jennifer H.; Wicklund, Kristine; Patterson, Ruth E.
CS Cancer Prevention Research Program, Fred Hutchinson Cancer Research Center, Seattle, WA, 98109, USA
SO Cancer Epidemiology, Biomarkers & Prevention (1999), 8(10), 887-892
CODEN: CEBPE4; ISSN: 1055-9965
PB American Association for Cancer Research
DT Journal
LA English
AB This population-based, case-control study in King County, Washington examd. supplement use in 697 incident prostate cancer cases (ages 40-64) identified from the Puget Sound Surveillance, Epidemiol. and End Results program registry and 666 controls recruited from the same overall population using random-digit dialing sampling. Participants reported their frequency of use of three types of multivitamins and single supplements of vitamins A, C, and E, calcium, iron, and zinc over the 2 yr

before diagnosis. Logistic regression analyses controlled for age, race, education, family history of prostate cancer, body mass index, no. of prostate-specific antigen tests in the previous 5 yr, and dietary fat intake. Adjusted odds ratios (95% confidence limits) for the contrast of .gtoreq.7/wk vs. no use were as follows: multivitamins, 0.96 (0.73, 1.26); vitamin A, 0.59 (0.32, 1.06); vitamin C, 0.77 (0.57, 1.04); vitamin E, 0.76 (0.54, 1.08); calcium, 1.04 (0.61, 1.78); iron, 0.50 (0.13, 1.76); and zinc, 0.55 (0.30, 1.00). Odds ratios differed little when cases were stratified by stage of disease at diagnosis or by histopathol. grade. There were significant dose-response effects for zinc and ordered dose-response trends for vitamins C and E. Overall, these results suggest that multivitamin use is not assocd. with prostate cancer risk, but use of individual supplements of zinc, vitamin C, and vitamin E may be protective. Further study is needed to investigate the direct role of these dietary supplements, as well as the role of lifestyle variables assocd. with supplement use, on prostate cancer risk.

RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 157 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:35392 HCAPLUS
DN 133:16760
TI Effects of selenium and vitamin E on vasoactive substances in myocardium of rats under cold stress
AU Jin, Yi; Li, Bao-Yu; Zhang, Hai-Ying; Li, Guang-Sheng
CS Qingdao Medical College of Qingdao University, Qingdio, 266021, Peop. Rep. China
SO Zhongguo Bingli Shengli Zazhi (1999), 15(10), 871-873
CODEN: ZBSZEB; ISSN: 1000-4718
PB Jinan Daxue
DT Journal
LA Chinese
AB To study the effects of selenium (Se) and vitamin E (VE) on vasoactive substances in myocardium of rats under cold stress. Sixty Wistar rats were divided into 6 groups: (1) Se- and VE-deficient I group (Se/VE DG I); (2) Se supplemented (0.1 mg/kg) group (Se/VE DG I + Se); (3) VE supplemented (100 mg/kg) group(Se/VE DG I + VE); (4) Se, VE supplemented group (Se/VE DG I + Se/VE); (5) Se- and VE-deficient grain II group (Se/VE DG II); (6) Stock group(SG). Rats were fed for 70 days and were put in ice water stressed before killed. The contents of endothelin (ET), nitric oxide (NO), noradrenaline (NE), angiotensin-II (Ang-II), activities of monoamine oxidase-A (MAO-A), superoxide dismutase (SOD), glutathione peroxidase (GSH-Px), and content of lipofuscin in myocardial were measured. Contents of ET, Ang-II and NE were obviously increased and contents of NO and activities of MAO-A, SOD, GSH-Px were markedly decreased in the myocardium of Se/VE DG I rats, but above items were improved in differently grade in those rats fed on Se/VE DG I supplemented Se, VE and Se/VE group. Se and/or VE played important role in some vasoactive substances of myocardium in rats fed on Se/VE deficient grain under cold stress.

L53 ANSWER 158 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:704394 HCAPLUS
DN 132:307685
TI Vitamin E enhances the immune functions of young but not old mice under restraint stress
AU Wakikawa, A.; Utsuyama, M.; Wakabayashi, A.; Kitagawa, M.; Hirokawa, K.

CS School of Medicine, Department of Pathology and Immunology, Tokyo Medical & Dental University, Tokyo, 113-8519, Japan
SO Experimental Gerontology (1999), 34(7), 853-862
CODEN: EXGEAB; ISSN: 0531-5565
PB Elsevier Science Inc.
DT Journal
LA English
AB Young and old C57BL/6 male mice were given a diet contg. a high dose of vitamin E (VE treatment) and its effect on the immune system was examd. before and after the exposure to restraint stress. The VE treatment per se gave rise to a slight increase of splenic T cells in percentage and a significant enhancement of Con A response of spleen cells in young, but not in old mice. The VE treatment also resulted in the enhancement of prodn. of IL-2 and IFN.gamma. in young, but not in old mice. Restraint stress led to thymic involution in both young and old mice. This thymic involution was not ameliorated by the VE treatment. Percentage of splenic T cells and their mitogenic response decreased just after the stress, but soon rebounded over the control level. The VE treatment further enhanced the recovery after the stress in young mice, but on the contrary suppressed the recovery in old mice. The results in the present study suggested that the VE treatment was effective in the prevention of immunol. decline of young mice before and after the exposure to the stress. On the other hand, such a preventive effect was not obsd. in old mice that were already in the depressed state of immunol. functions.
RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 159 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:759883 HCAPLUS
DN 132:356
TI Naloxone and vitamin E block stress-induced reduction of locomotor activity and elevation of plasma corticosterone
AU Ainsah, O.; Nabishah, B. M.; Osman, C. B.; Khalid, Bak A. K.
CS Dep. Psychiatry, Univ. Kebangsaan Malaysia, Kuala Lumpur, 56000, Malay.
SO Experimental and Clinical Endocrinology & Diabetes (1999), 107(7), 462-467
CODEN: ECEDFQ; ISSN: 0947-7349
PB Johann Ambrosius Barth
DT Journal
LA English
AB Normal rats, on being repetitively stressed by being restrained in a tight container for 2 h, had higher levels of blood plasma corticosterone compared to pre stress values. These rats also reacted to the stress by a behavioral response in which there was marked decrease in locomotor activity assessed by the open field test (pre stress: 71.3 squares crossed vs. post stress: 14.3 squares crossed) by counting the no. of squares entered by the rat over 5 min. By the 6th to 7th exposures to the repetitive stress, the rats adapted to the stress and had normal plasma corticosterone levels and locomotor activity scores comparable to the pre stress values. These responses to stress were completely blocked by the administration of 0.32 .mu.g/100 g BW of naloxone i.p. at 10 min prior to the stress. In rats fed with rat chow supplemented with 90 mg/kg rat chow or 150 mg/kg rat chow of vitamin E, there was redn. of the plasma corticosterone levels and improvement in the locomotor activity. Stress thus caused opioid mediated increase in plasma corticosterone and redn. in locomotor activity which could be blocked by naloxone. These stress responses probably also involved generation of oxygen free radicals which were scavenged by the vitamin E, thus reducing the effects of repetitive

stress on locomotor activity and serum corticosterone levels.
RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 160 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:123843 HCAPLUS
DN 130:279798
TI PAK2 is cleaved and activated during hyperosmotic shock-induced apoptosis via a caspase-dependent mechanism: evidence for the involvement of oxidative stress
AU Chan, Wen-Hsiung; Yu, Jau-Song; Yang, Shiaw-Der
CS Department of Life Sciences, National Tsing Hua University, Hsinchu, Taiwan
SO Journal of Cellular Physiology (1999), 178(3), 397-408
CODEN: JCLLAX; ISSN: 0021-9541
PB Wiley-Liss, Inc.
DT Journal
LA English
AB Hyperosmotic shock elicits a stress response in mammalian cells and can lead to apoptotic cell death. In the present study, we report that hyperosmotic shock can induce activation of a 36 kDA kinase detected by an in-gel kinase assay in several cell types, including mouse Balb/c 3T3 fibroblasts, and human Hep 3B and A431 cells. This 36 kDa kinase can be recognized by an antibody against the C-terminal region of a family of p21Cdc42/Rac -activated kinases (PAKs) on immunoblot. Further studies with this antibody and a PAK2-specific antibody against the N-terminal region of PAK2 demonstrate that hyperosmotic shock can induce cleavage of PAK2 to generate a 36 kDa C-terminal catalytic fragment in cells. The cleavage and activation of PAK2 was found to be closely assocd. with both DNA fragmentation and activation of an ICE/CED-3 family cysteine protease termed caspase-3 in hyperosmotically shocked cells. Furthermore, pretreating the cells with two caspase inhibitors (Ac-DEVD-cho and Ac-YVAD-cmk) could inhibit both cleavage/activation of PAK2 and DNA fragmentation induced by hyperosmotic shock. Moreover, all these hyperosmotic shock-induced changes (i.e., activation of caspase-3, cleavage/activation of PAK2, and DNA fragmentation) in cells could be blocked by antioxidants such as ascorbic acid (vitamin C), .alpha.-tocopherol (vitamin E), dithiothreitol, .beta.-mercaptoethanol, and glutathione. Taken together, our results show that PAK2 is cleaved and activated via a caspase-dependent mechanism during hyperosmotic shock-induced apoptosis and suggest the involvement of antioxidant-preventable oxidative stress in inducing this process.
RE.CNT 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 161 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:684412 HCAPLUS
DN 132:151017
TI Synergism between vitamins E and C: biological implications for future research
AU Berry, Elliot M.; Dal Maso, Luigino; Franceschi, Silvia
CS Department of Human Nutrition and Metabolism, Hebrew University-Hadassah Medical School, Jerusalem, Israel
SO International Journal of Cancer (1999), 83(2), 288
CODEN: IJCNAW; ISSN: 0020-7136
PB Wiley-Liss, Inc.
DT Journal

LA English
AB Current dietary recommendations for vitamin intake ignore possible biol. interactions whereby supplementation with individual anti-oxidants may be ineffective or even, paradoxically, harmful (Omenn et al., 1996). The many anti-oxidants present in the body, which differ by location, function and activity, may be part of a biol. organized system responsible for maintaining the redox potential of tissues in a manner analogous to pH regulation (Berry and Kohen, 1999). Thus, membrane polyunsatd. fatty acids (PUFAs) are protected from oxidn. by a cascade sequence of redox reactions between .beta.-carotene, vitamin E, vitamin C and glutathione (selenium). It has also been suggested that vitamin C is required to maintain sufficient concns. of active vitamin E, but there are not in many examples of the validity of this concept in humans (Harats et al., 1998). Dietary intake data from an Italian case-control study of colorectal cancer (La Vecchia et al., 1997) appear to support such a possible synergism. The study included 1,953 incident patients (44% women) with histol. confirmed colorectal cancer and 4,154 controls (40% women) admitted to hospital for acute non-neoplastic diseases in 6 Italian areas (La Vecchia et al., 1997). Dietary habits were recorded using a validated food-frequency questionnaire. Vitamin C and vitamin E intakes were inversely assocd. with risk for colorectal cancer also after adjustment for mutual confounding effects (Table I). The odds ratio for the highest tertiles of intake for both vitamins C and E (0.55) was, however, significantly lower than would be predicted for the combined effect of the 2 vitamins using either an additive (0.93 .+-. 0.88 - I = 0.81) or a multiplicative (0.93 x 0.88 = 0.82) model. The beneficial effect of each vitamin was significantly greater in individuals who reported intake of the other vitamin in the highest vs. lowest tertile. In fact, at the lowest tertiles of each vitamin, increasing intakes of the other vitamin did not appear to confer any significant benefit. This may imply threshold vitamin intakes for biol. activity, in this study, of approx. 11.9 mg/day for vitamin E and 103 mg/day for vitamin C. Examples of synergism may be found for other diseases, such as atherosclerosis, and with other dietary combinations for which there may be a biol. rationale, such as Bi2, folic acid and pyridoxine in the regulation of hornocysteine concns. (Woodside et al., 1998). For the time being. our present findings on colorectal cancer suggest that future prospective controlled trials and nutritional recommendations should take into account possible interactions between nutrients as is currently advised concerning intakes of PUFA and vitamin E.
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 162 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:660547 HCAPLUS
DN 134:192582
TI Provitamin C. Free radical scavenging and prevention of cell death by a high enrichment of ascorbic acid
AU Hayashi, Saori; Nagao, Norio; Miwa, Nobuhiko
CS Department of Bioresources, Hiroshima University, Japan
SO Roka Yobo Shokuhin no Kaihatsu (1999), 217-234. Editor(s): Yoshikawa, Toshikazu. Publisher: Shi Emu Shi, Tokyo, Japan.
CODEN: 69AHQ6
DT Conference; **General Review**
LA Japanese
AB A review with 13 refs. on physiol. functions of provitamin C (Asc2P, Asc2P6Plm, VC-IP, Asc2G) in relation to prevention of aging, covering the

antitumor effect, prevention of skin and DNA damage due to UV, etc.

L53 ANSWER 163 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:168568 HCAPLUS
DN 131:18291
TI Cancer and vitamins
AU Miwa, Yoshiyuki; Muto, Yasutoshi
CS Sugiyama Human Nutrition Research Center, Japan
SO Eiyo: Hyoka to Chiryo (1999), 16(1), 47-51
CODEN: EHCHES; ISSN: 0915-759X
PB Medikaru Rebyusha
DT Journal; **General Review**
LA Japanese
AB A review with 15 refs. on the antitumor effects of vitamins, esp. carotenoids and lung cancer, vitamin C and gastric cancer, and acyclic retinoids and hepatoma.

L53 ANSWER 164 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:244909 HCAPLUS
DN 131:72998
TI Effects of astaxanthin and vitamins on prevention of gastric ulceration of stressed rat
AU Nishikawa, Yoshiyuki; Minenaka, Yoshiharu; Ichimura, Mika
CS Coll. Nutr., Koshien Univ., Takarazuka, 665, Japan
SO Koshien Daigaku Kiyo, A: Eiyogakubu-hen (1999), Volume Date 1998, 26, 45-52
CODEN: KDKAEH; ISSN: 0913-5537
PB Koshien Daigaku
DT Journal
LA Japanese
AB Antioxidant vitamins, such as vitamin C and E and .beta.-carotene, may decrease the risk of cancer or cardiovascular disease. The carotenoid astaxanthin (Asx) is a red pigment found in fishes and Crustacea. It has stronger reducing activity than other carotenoids like .beta.-carotene. The physiol. and biochem. effects of Asx and vitamin C were studied in stressed rats. Asx extd. from Haematococcus or Phaffia or chem. synthesized were used in this expt. Rats given 400 mg astaxanthin or .beta.-carotene/kg feed grew well as with the normal dose (80 mg/kg feed) or control diet fed for 11 days. No differences were found among the 3 sources of Asx, except that blood serum activities of GPT and GGT and ulcer index showed slightly lower values with Haem-Asx. Rats fed Asx or vitamin C before stress had appreciably less gastric ulceration than control rats. The effects were more intense in rats fed Asx plus vitamin C than in rats given Asx or vitamin C alone. Thus, simultaneous dietary supplements of Asx and vitamin C may protect from stress.

L53 ANSWER 165 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:740076 HCAPLUS
DN 132:221828
TI Vitamin E helps layers overcome stress
AU Smith, Adam
CS NuTec, Lichfield, UK
SO Feed Mix (1999), 7(5), 16-17
CODEN: FEMIF4; ISSN: 0928-124X
PB Elsevier International Business Information
DT Journal
LA English

AB This article describes the impact of dietary vitamin E on the behavioral, biochem. and physiol. adaptations in poultry.

L53 ANSWER 166 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:66780 HCAPLUS
DN 130:295865
TI Antioxidant vitamins in the prevention of cancer
AU Lee, I-Min
CS Division of Preventive Medicine, Department of Medicine, Brigham and Women's Hospital and Harvard Medical School, Boston, MA, 02215, USA
SO Proceedings of the Association of American Physicians (1999), 111(1), 10-15
CODEN: PAAPFD; ISSN: 1081-650X
PB Blackwell Science, Inc.
DT Journal; **General Review**
LA English
AB A review with 44 refs. Cancer is a leading cause of morbidity and mortality in the United States and other developed countries. In searching for preventive strategies against this disease, researchers have postulated that antioxidant vitamins may play a role in preventing cancer since several plausible biol. mechanisms exist. This article reviews the epidemiol. evidence for a role of antioxidant vitamins (in particular, beta-carotene, vitamin E, and vitamin C) in the development of cancer. Observational studies provide fairly consistent data for an inverse assocn. between high intake of antioxidant vitamins, esp. beta-carotene and vitamin C, and cancer risk. However, randomized trials generally have not supported the hypothesis. Several explanations for these inconsistent findings are possible. These include: 1) confounding by other healthy dietary and nondietary habits in observational studies; 2) the protective role of a combination of many different nutrients present in fruits and vegetables, rather than the single nutrient or combination of two nutrients that most trials have tested; 3) inadequate duration of follow-up in most randomized trials; and 4) heterogeneity of the populations studied. Reliable epidemiol. evidence regarding whether antioxidant vitamins play a role in preventing cancer will have to come from both observational studies and randomized trials since these different study designs each have unique strengths and limitations. Based on the available evidence, it seems prudent to advocate a diet rich in fruits and vegetables, rather than the consumption of specific antioxidant vitamin supplements, in order to decrease the risk of developing cancer.
RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 167 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:608534 HCAPLUS
DN 129:225723
TI The use of heme-peptides to prevent or retard disease associated with oxidative stress
IN Spector, Abraham; Ma, Wanchao; Wang, Ren-Rong
PA The Trustees of Columbia University in the City of New York, USA
SO PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI WO 9837908 A1 19980903 WO 1998-US3857 19980227
W: AU, CA, JP, MX, US
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
US 6013623 A 20000111 US 1997-807482 19970227
AU 9864424 A1 19980918 AU 1998-64424 19980227
PRAI US 1997-807482 19970227
WO 1998-US3857 19980227
AB A method for treating a condition assocd. with oxidative stress in a subject comprises administering an effective amt. of a heme-peptide. The subject may be a mammal. The mammal may be a human being. The condition assocd. with oxidative stress may be an inflammatory condition, an allergic condition or an auto-immune condition.
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 168 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:14818 HCAPLUS
DN 130:222487
TI Nitroblue tetrazolium reduction of neutrophils in heat stressed goats is not influenced by selenium and vitamin E injection
AU Katamoto, Hiromu; Fukuda, Hiroshi; Oshima, Izumi; Ishikawa, Naoto; Kanai, Yukio
CS Department of Veterinary Surgery, Osaka Prefecture University, Osaka, 599-8531, Japan
SO Journal of Veterinary Medical Science (1998), 60(11), 1243-1249
CODEN: JVMSEQ; ISSN: 0916-7250
PB Japanese Society of Veterinary Science
DT Journal
LA English
AB An expt. was designed to det. whether heat stress suppresses neutrophil function and injections of selenium and vitamin E prior to heat stress prevent suppression of neutrophil function in goats. Twelve female goats were divided into 2 groups of 6 each and were kept at 25.degree.. Goats in the treatment group were injected i.m. with 0.1 mg/kg of Se and 2.72 IU/kg of vitamin E at 8 and 1 day prior to the initiation of heat stress. The other group was kept as control. All goats were exposed to hot environment at 38.degree.C from day 0 through 8. Decreased tendency in plasma cortisol concns. and temporary increase in plasma glucose concns. were shown in both groups. In the control group, plasma Se concn. gradually increased and .alpha.-tocopherol concn. decreased during the first 2 days. After the second injection with selenium and vitamin E, plasma selenium and .alpha.-tocopherol concns. significantly increased and remained higher than those in the control group. Whole blood glutathione peroxidase (GSH-Px) activity in the treatment group tended to be greater than that in the control group, but no significant difference was obsd. between the 2 groups. The nitroblue tetrazolium (NBT) redn. by activated neutrophils significantly decreased on day 6 in the control group but not in the treatment group. The NBT redn. by resting neutrophils significantly decreased in both groups. These data suggest that heat stress depresses neutrophil function, and selenium and vitamin E injection prior to heat stress has no apparent effect on neutrophil function during the stress.
RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 169 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:286384 HCAPLUS

DN 129:81063
TI Influence of supplementation of practical diets with vitamin C on growth and response to hypoxic stress of seabream, Sparus aurata
AU Henrique, M. M. F.; Gomes, E. F.; Gouillou-Coustans, M. F.; Oliva-Teles, A.; Davies, S. J.
CS Instituto de Ciencias Biomedicas Abel Salazar, Laboratorio de Fisiologia Aplicada, Universidade do Porto, Oporto, 4050, Port.
SO Aquaculture (1998), 161(1-4), 415-426
CODEN: AQCLAL; ISSN: 0044-8486
PB Elsevier Science B.V.
DT Journal
LA English
AB Gilthead seabream were fed a fish meal based diet, supplemented with graded amts. of ascorbyl polyphosphate equiv. to 0, 25, 50, 100 and 200 mg of l-ascorbate (AA)/kg, for 12 wk. Although there were no significant differences between growth rates of each group, the feed gain ratio and voluntary feed intake were significantly lower, and the protein efficiency ratio was significantly higher for the fish fed 200 mg AA/kg, when compared with the group fed 0 mg AA/kg. An increase of the ascorbate concn. within the liver and spleen occurred with the increasing vitamin supplementation. After 12 wk, the fish were subjected to hypoxia for 24 h to det. the influence of AA supplementation on the physiol. response to this stressor. A significant hyperglycemia occurred in fish fed all the diets 3 h after the onset of stress, although a significantly higher resting plasma glucose was obsd. in fish fed the AA free diet. No significant difference was found in plasma cortisol concn. with stress, with the exception of fish fed the 100 mg of AA/kg diet, where a significantly lower cortisol level was found after 9 h of hypoxia. Fish fed the non-supplemented diet showed wider variation and a tendency to increase this variable, having significantly higher levels at 9 h and 24 h of stress then all the other groups and than fish fed the 200 mg AA/kg diet, resp. Stress had no detectable effect on liver AA concn. in all groups. However, spleen AA showed significantly increased levels between 3-6 h of hypoxic stress in fish fed 25 and 200 mg AA/kg diet and a further increase after 9 h in fish fed the 200 mg of AA/kg diet. These results suggest that the ascorbic acid requirements for seabream is less than 25 mg/kg diet based on a 12-wk growth study and that it requires about a four-field increase in wt. before signs of deficiency can be obsd. Also, the fact that no variation in liver vitamin C concn. was be detected as a response to stress, suggests that this kind of stress does not significantly increase the utilization of this vitamin. However, a possible relation between dietary ascorbate and the physiol. response to hypoxia was found, since the fish receiving the non-supplemented diet showed increased plasma glucose and a tendency to have wider plasma cortisol variations than the fish fed the supplemented diets.
RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 170 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:202826 HCAPLUS
DN 128:255725
TI Antioxidants and protection for carcinogenesis
AU Yamanaka, Naoki
CS Nagoya Meml. Hosp., Nagoya, 468, Japan
SO Rinsho Eiyo (1998), 92(4), 392-396
CODEN: RNEYAW; ISSN: 0485-1412
PB Ishiyaku Shuppan

DT Journal; **General Review**
LA Japanese
AB A review with 17 refs., on prevention of carcinogenesis by antioxidative vitamins (vitamin E and C, and vitamin A including .beta.-carotene) and polyphenols including flavonoids.

L53 ANSWER 171 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:540228 HCAPLUS
DN 129:328770
TI The effect of dietary vitamin E on content of MDA and activity of (Na, K)-ATPase in RBC membrane of cold-stress rats
AU Wang, Feng; Dong, Zhaosheng; Chen, Yaomin; Zhang, Yinyu
CS Department of Troops Hygiene, 4th Military Medical University, Xi'an, 710032, Peop. Rep. China
SO Zhongguo Gonggong Weisheng Xuebao (1998), 17(2), 113-114
CODEN: ZGWXEQ; ISSN: 1001-0572
PB Zhongguo Gonggong Weisheng Zazhi Chubanshe
DT Journal
LA Chinese
AB The effect of dietary vitamin E on content of MDA and activity of (Na, K)-ATPase in RBC membrane of cold-stress rats were studied. The exptl. animals were fed on high and low vitamin E diet at 18.degree.C for 2 wk and then kept the cold exposed rats at 1.+-.1.degree.C for 24 h. Cold stress increased the RBC membrane MDA content and ATPase activity. High diet vitamin E decreased the cold stress induced MDA increase and enhanced the (Na,K)-ATPase increase; the MDA content and (Na,K)-ATPase were neg. correlated. The results suggest that dietary vitamin E inhibits lipid peroxidn., eradicates free radical, protects cell membrane and induces increase of (Na,K)-ATPase activity.

L53 ANSWER 172 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:452412 HCAPLUS
DN 129:216057
TI Effects of vitamins E and C on human breast cancer cell growth in the presence of various fatty acids
AU Kim, Gun-Hee; Cho, Il-Jin; Oh, Sun-Hee; Park, Hee-Sung; Cho, Sung-Hee
CS Dept. of Food Science and Nutrition, Catholic University of Taegu-Hyosung, Kyung-buk, 712-702, S. Korea
SO Journal of Food Science and Nutrition (1998), 3(1), 85-91
CODEN: JFSNFW; ISSN: 1226-332X
PB Korean Society of Food Science and Nutrition
DT Journal
LA English
AB To investigate the effects of antioxidative vitamins in combination with various fatty acids on breast cancer cell proliferation, MDA-MB231 human breast cancer cells were cultured for 3 days in the serum-free Iscove's modified Dulbecco's medium(IMDM) supplemented with 1.25mg/mL delipidized bovine serum albumin and 10.mu.g/mL insulin. Alpha-tocopherol, ascorbic acid or both vitamins were added to the medium at the concns. of 10 and 50.mu.M in the presence of 3.mu.g/mL of oleic(OA), linoleic(LA) .alpha.-linolenic(LNA) and docosahexaenoic acid(DHA). Cell growth was reduced significantly by .alpha.-tocopherol in a dose-dependent manner, but not affected by ascorbic acid. The four different fatty acids did not have significant effects on cell growth, although DHA exerted inhibitory effect on the growth after 1 day. However, each fatty acid was well incorporated into cellular lipid as such or as elongated forms. Addn. of .alpha.-tocopherol remarkably increased its cellular contents and reduced

cellular levels of thiobarbituric acid substances(TBARS) that were elevated notably in the presence of DHA in the culture media. But ascorbic acid addn. did not change much of either cellular .alpha.-tocopherol or TBARS contents. Northern blot hybridization showed that tumor suppressor gene p53 was most highly expressed by the combination of .alpha.-tocopherol and DHA in 8 h of cell culture. In conclusion, the growth inhibitory effect of vitamin E suggests that breast cancer cell proliferation is reduced by a mechanism other than cytotoxicity of lipid peroxide and it is related to expression of tumor suppressor gene p53, that can be increased by both vitamin E and n-3 fatty acid, DHA.

RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 173 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:401162 HCAPLUS
DN 129:108332
TI Vitamin E: mechanisms of action as tumor cell growth inhibitors
AU Kline, Kimberly; Yu, Weiping; Sanders, Bob G.
CS Division of Nutrition, The University of Texas at Austin, Austin, TX, 78712, USA
SO Cancer and Nutrition (1998), 37-53. Editor(s): Prasad, Kedar N.; Cole, William C. Publisher: IOS Press, Amsterdam, Neth.
CODEN: 66HKAD
DT Conference; **General Review**
LA English
AB A review with 57 refs. Vitamin E and some of its derivs., notably the succinate ester of RRR-.alpha.-tocopherol, RRR-.alpha.-tocopheryl succinate (vitamin E succinate, VES), are being studied for potential use as anti-cancer agents. VES has been shown to inhibit the proliferation of several tumor cell types in vitro as well as in vivo. VES is noteworthy not only for its antiproliferative effects on tumor cells but also for its low toxicity toward normal cell types. Although the mechanisms of growth inhibition of tumor cells by VES are not yet fully understood, it is clear that VES possesses unique biol. properties independent of those of RRR-.alpha.-tocopherol (natural vitamin E) which is well known for its antioxidant properties. DNA synthesis arrest, induction of cellular differentiation, enhanced secretion and activation of potent epithelial cell growth inhibitors called transforming growth factor-betas (TGF-.beta.), and enhanced expression of cell surface proteins required for TGF-.beta. signalling, as well as induction of programmed cell death (apoptosis) have been obsd. in VES-treated tumor cells. These interesting biol. properties place VES among a select group of compds. that are being tested for both chemopreventive as well as chemotherapeutic actions; namely, monoterpenes (d-limonene and perillyl alc.), retinoids, and vitamin D analogs.

RE.CNT 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 174 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:384599 HCAPLUS
DN 129:94825
TI The effects of vitamin E on gastric ulcers and gastric mucosal barrier in stress induced rats
AU Guzel, Cihat; Kurt, Dogan; Sermet, Abdurrahman; Kanay, Zeki; Denli, Orhan; Canoruc, Fikri
CS Departments of Physiology, Faculty of medicine, Dicle University,

Diyarbakir, Turk.
SO Turkish Journal of Medical Sciences (1998), 28(1), 19-21
CODEN: TJMEEA; ISSN: 1300-0144
PB Scientific and Technical Research Council of Turkey
DT Journal
LA English
AB Effects of vitamin E on gastric ulcers gastric mucosal barrier were investigated in cold + restraint stress (CRS) induced rats. In this study 21 males two month old Swiss Albino Rats were used. Stress treated rats significantly decreased mucus and phospholipid content of gastric mucosa ($p<0.01$, $P<0.01$). Vitamin E was administered orally in the dose of 100 mg/kg body wt. thirty min. before stress. Vitamin E reduced significantly gastric ulceration ($p<0.01$). Moreover, it significantly protected mucus secretion and phospholipid content of gastric mucosa in rats ($p<0.01$, $p<0.01$, resp.). These results indicate that extrinsic application of vitamin E may strengthen gastric mucosal barrier in rats.
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 175 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:1380 HCAPLUS
DN 128:70767
TI Genistein as a preventive against ultraviolet induced skin photodamage and cancer
IN Wei, Huachen
PA Mt. Sinai School of Medicine, University of New York, USA
SO PCT Int. Appl., 16 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9746208	A2	19971211	WO 1997-US11963	19970609
	WO 9746208	A3	19980219		
	W: AU, CA, GB, IL, JP				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5824702	A	19981020	US 1996-657915	19960607
	AU 9737225	A1	19980105	AU 1997-37225	19970609
	AU 716131	B2	20000217		
	EP 918504	A2	19990602	EP 1997-934083	19970609
	EP 918504	B1	20030319		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2000511907	T2	20000912	JP 1998-500949	19970609
	AT 234599	E	20030415	AT 1997-934083	19970609
	ES 2188963	T3	20030701	ES 1997-934083	19970609
PRAI	US 1996-657915	A	19960607		
	WO 1997-US11963	W	19970609		

AB A method of inhibiting the harmful effect of UV radiation exposure to the human skin comprising topically applying a therapeutically effective amt. of genistein (I) to the skin at a time sufficiently close to the time of UV radiation exposure to inhibit UV radiation-induced damage to the skin. The genistein appears to act as a chemo preventative agent since it has no appreciable sun blocking effect. The genistein may be mixed with a variety of carriers and skin treatment compns. A human subject was topically treated with a 5 .mu.mol soln. of I/cm2 of skin then, exposed to

0-90mJ/cm2 UVB. The skin was completely protected against akin erythema while the controls showed UVB dos-dependent induction of skin erythema.

L53 ANSWER 176 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:340721 HCAPLUS
DN 127:39870
TI Pharmaceutical compositions for cancer prevention
IN Kawashima, Zenichi
PA Kawashima, Takaaki, Japan; Kato, Shigeru
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 09077674	A2	19970325	JP 1996-6433	19960118
PRAI JP 1995-171862		19950707		

AB Pharmaceutical compns. [e.g. tablets] for cancer prevention comprise dried yeasts and .gtoreq.1 substances selected from vitamin C, vitamin E, DHA, .beta.-carotene, catalase and ginkgo exts. with/without bacteria enzymes.

L53 ANSWER 177 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:800888 HCAPLUS
DN 132:15614
TI Anticancer compositions
IN Wen, Bin
PA Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 5 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CN 1156588	A	19970813	CN 1996-115669	19960205
PRAI CN 1996-115669		19960205		

AB Anticancer compns. [tablets, capsules] comprise tinidazole 0.5-2.0, vitamin E 1.0-0.3, vitamin A 0.01-0.03, and vitamin C 0.3-0.8 parts. The medicine may also contain astemizole 0.005-0.015 and metoclopramide 0.005-0.03 parts.

L53 ANSWER 178 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:302933 HCAPLUS
DN 126:276782
TI Antistress agents for aquatic animals
IN Kuerzinger, Hubert
PA Tetra Werke Dr. Rer. Nat. Ulrich Baensch Gmbh, Germany; Kuerzinger, Hubert
SO PCT Int. Appl., 17 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9708960	A1	19970313	WO 1996-EP3689	19960822

W: AL, AM, AU, AZ, BY, CA, CN, CZ, EE, GE, HU, IL, JP, KG, KP, KR,

KZ, LK, LT, LV, MD, MN, NZ, RU, SG, SI, SK, TJ, TM, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

CA	2231244	AA	19970313	CA 1996-2231244	19960822
AU	9669269	A1	19970327	AU 1996-69269	19960822
AU	718898	B2	20000420		
EP	848592	A1	19980624	EP 1996-930072	19960822
EP	848592	B1	20001102		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI				
JP	11514973	T2	19991221	JP 1996-510811	19960822
AT	197225	E	20001115	AT 1996-930072	19960822
ES	2152039	T3	20010116	ES 1996-930072	19960822
PT	848592	T	20010330	PT 1996-96930072	19960822
US	6306453	B1	20011023	US 1998-29388	19980608
GR	3035228	T3	20010430	GR 2001-400044	20010111
PRAI DE	1995-19532682	A	19950905		
WO	1996-EP3689	W	19960822		

AB The invention pertains to antistress agents to improve the resistance of aquatic animals, in particular fish, shrimp and invertebrates in fresh water and salt water, to stresses of all kinds; these can also be used as antistress agents for warm- and cold-water aquarium fish and contain a vitamin or a combination of vitamins in megadoses and one or more immunostimulants.

L53 ANSWER 179 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:589969 HCAPLUS
DN 127:247440
TI Effects of supplemental ascorbic acid on the energy conversion of broiler chicks during heat stress and feed withdrawal
AU Mckee, J. S.; Harrison, P. C.; Riskowski, G. L.
CS Department of Animal Sciences and Agricultural Engineering, University of Illinois at Urbana-Champaign, Urbana, IL, 61801, USA
SO Poultry Science (1997), 76(9), 1278-1286
CODEN: POSCAL; ISSN: 0032-5791
PB Poultry Science Association, Inc.
DT Journal
LA English
AB The objectives of this study were 1) to det. the effects of supplemental ascorbic acid (AA) on the energy conversion of broiler chicks maintained at thermoneutral and potential heat stress temps. using indirect convective calorimetry; and 2) to det. whether changes in energy conversion are reflected in changes in lipid metab. In Expt. 1, 120 2-d-old cockerels, housed in two identical environmental chambers, were maintained under const. light (2.0 .+-. 0.2 fc) and recommended thermal conditions (29.6 .+-. 0.8.degree.C; 33.4 .+-. 8.0% RH) and consumed water and feed ad libitum. Beginning on Day 8 posthatch, one-half of the birds inside each chamber were randomly assigned and received feed supplemented with AA. Beginning on Day 9 posthatch, the temp. inside one chamber was increased to 34.degree.C whereas the other chamber remained thermoneutral. This design resulted in four treatments: 1) thermoneutral (TN: 27.7 .+-. 0.8 C; 40.9 .+-. 9.4% RH) and 0 mg AA/kg feed (ppm); 2) TN and 150 ppm AA; 3) heat stress (H: 33.8 .+-. 0.5 C; 43.3 .+-. 7.4% RH) and 0 ppm AA; or 4) H and 150 ppm AA. Also beginning on Day 9 posthatch, birds were randomly assigned to one of three identical, indirect convective calorimeters designed to accommodate TN or H. Oxygen consumption, carbon dioxide prodn., RQ, and heat prodn. were evaluated daily for 8 h, through Day 17

posthatch. Following calorimetric measurement, birds were returned to their resp. caging unit/chamber for the remainder of the study. Wt. gain, feed intake, and gain:feed were also measured over the 9-d study. Heat exposure depressed ($P < 0.05$) wt. gain, feed intake, and gain:feed. Ascorbic acid increased ($P < 0.10$) wt. gain. Oxygen consumption and carbon dioxide and heat prodn. per kg0.75 decreased ($P < 0.05$) with age with no change in the RQ. Heat exposure lowered ($P < 0.001$) the RQ. A temp. by AA interaction was detected in which heat-exposed birds expressed lower ($P < 0.10$) RQs when consuming the AA-supplemented diet. In Expt. 2, 18 2-d-old cockerels, housed in an environmental chamber, were maintained under const. light and recommended thermal conditions (29.3 .+-. 0.4.degree.C; 41.4 .+-. 3.3% RH) and consumed water and feed ad libitum. On Day 9 posthatch, birds were deprived of feed for 24 h with ad libitum access to water supplemented with either 0 or 400 mg AA/L. Blood samples were obtained from each bird before and after feed withdrawal and supplementation. Supplemented birds exhibited elevated ($P < 0.01$) plasma AA, levels that were not affected by feed deprivation. Feed deprivation increased ($P < 0.0001$) plasma .beta.-hydroxybutyrate with no effect of AA, and decreased ($P < 0.05$) plasma triglycerides in the unsupplemented birds. A feed withdrawal by AA interaction was detected in which plasma triglycerides remained elevated in birds supplemented with AA. These data suggest that supplemental AA influences body energy stores that are used for energy purposes during periods of reduced energy intake.

L53 ANSWER 180 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:658143 HCAPLUS
DN 127:306860
TI Effect of vitamin C and .beta.-carotene administration on physical and psychological response to stress infliction, especially in relation to banana intake
AU Shioiri, Terue; Iijima, Yumiko; Inaba, Yumi; Oshima, Yukiko; Soeno, Naoko; Inomata, Michiko; Saito, Reiko; Kimoto, Kouichi; Tomabechi, Konosuke; Mita, Reizo; Ikegami, Sachie; Kobayashi, Shuhei
CS Tokyo Kasei Univ., Tokyo, 173, Japan
SO Eiyogaku Zasshi (1997), 55(4), 179-187
CODEN: EYGZAD; ISSN: 0021-5147
PB Kokumin Eiyo Shinkokai
DT Journal
LA Japanese
AB We conducted an expt. on 14 healthy female students to observe influences of stress infliction upon subjective symptoms and urinary catecholamine excretion. We divided subjects into 4 groups; [1] basic diet, [2] basic diet with 150 g of banana, [3] basic diet, 150 of banana and 30 mg of .beta.-carotene, [4] basic diet, 150 g of banana and 500 mg of ascorbic acid. The exptl. period was 6 days. Stresses were inflicted by 6 consecutive hours per day of calcn. of math. problems on the 5th and 6th days. Intake of banana caused increments of urinary dopamine and noradrenaline excretion with significant differences from the basic diet group. The amt. of urinary adrenaline excretion was not influenced by banana intake while the amt. was increased by stress infliction in every group. The no. of stress-induced subjective symptoms further increased in students with banana intake, but the increase was not obsd. when vitamin C or .beta.-carotene was administered to the subjects prior to stress infliction.

L53 ANSWER 181 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:191259 HCAPLUS

DN 126:271894
TI Dose-related preventive and therapeutic effects of antioxidants-anticarcinogens on experimentally induced malignant tumors in Wistar rats
AU Evangelou, A.; Kalpouzos, G.; Karkabounas, S.; Liasko, R.; Nonni, A.; Stefanou, D.; Kallistratos, G.
CS Laboratory of Experimental Physiology, Faculty of Medicine, University of Ioannina, GR-45110, Ioannina, Greece
SO Cancer Letters (Shannon, Ireland) (1997), 115(1), 105-111
CODEN: CALEDQ; ISSN: 0304-3835
PB Elsevier
DT Journal
LA English
AB A combination of antioxidants-anticarcinogens, consisting of vitamins C and E, selenium and 2-mercaptopropionyl glycine (2-MPG), was administered orally for the prevention (PRG) and treatment (TRG) of benzo(a)pyrene (BaP)-induced malignant tumors (leiomyosarcomas), in Wistar rats. In order to evaluate dose-related effects, a low dose vitamin (0.15 g/kg b.w. per day of vit.C and 0.05 g/kg b.w. per day of vit.E) and a high dose (1.5 g/kg b.w. per day of vit.C and 0.5 g/kg b.w. per day of vit.E) combination was administered, in prevention and treatment groups. Selenium was administered in doses of 2 .mu.g/kg b.w. per day and 2-MPG in 15 mg/kg b.w. per day, in all groups. Daily estns. of 24 h urine vol. levels of thiobarbituric acid reacting substances (MDA) were performed in 20 animals, divided into a control group, a BaP-injected group, a tricapryline-injected group and a BaP-injected and treated by the low dose combination group. Results revealed that the low dose combination failed to exert any beneficial effect on mean survival time of animals treated either preventatively or therapeutically. An increased no. of animals bearing a second (lung) tumor was, in addn., found in autopsy and histol. examn. in the low dose combination (PRG and TRG) and the high dose TRG groups. The high dose combination groups manifested a significant prolongation of the mean survival time of animals; complete remission of tumors developed in 16.8% of the animals in the treatment group and a 5.2% prevention of tumor formation in the preventive group, without any evidence of an increased no. of double tumor formation in the PRG group. Urine MDA increased significantly in animals injected by BaP during the first 10 days and since the 90th day (formation of palpable tumors) after injection, in relation to control and tricapryline-injected groups. Complete prevention of urine MDA-increased values was obtained in BaP-injected and treated by the low dose combination animals. Results indicate that high doses (megadoses) of the antioxidant-anticarcinogen vitamins C and E in combination with carefully selected other antioxidants possessing supplementary actions, are probably needed in order to achieve a sufficient prevention and treatment of malignant diseases.

L53 ANSWER 182 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:292815 HCAPLUS
DN 126:311832
TI Chemoprevention of colorectal tumors: role of lactulose and of other agents
AU De Leon, M. Ponz; Roncucci, L.
CS Dept. of Internal Medicine, University of Modena, Modena, Italy
SO Scandinavian Journal of Gastroenterology, Supplement (1997), 32(222), 72-75
CODEN: SJGSB8; ISSN: 0085-5928
PB Scandinavian University Press
DT Journal

LA English
AB A controlled study was carried out in which antioxidant vitamins or lactulose were used in an attempt to prevent the recurrence of colorectal polyps after their endoscopic removal. Among the 209 patients evaluated, polyps recurred in 5.7% of the individuals who were given vitamins (A, C and E), in 14.7% of the patients given lactulose and in 35.9% of untreated controls. The study suggested that either antioxidant vitamins or lactulose could be effective in reducing the recurrence rate of adenomatous polyps. In a subsequent, on-going study, lower doses of the same vitamins were tested vs. N-acetylcysteine (600 mg/day) or no treatment. Preliminary results showed a 40% redn. of the recurrence of polyps (vs. controls) in individuals given N-acetylcysteine, while the effect of lower doses of the vitamins was less appreciable.
RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 183 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:233746 HCAPLUS
DN 126:324783
TI Development of lipophilic derivatives of vitamin C. Skin-protecting and lightening effects and antitumor and metastasis-inhibitory effects
AU Murata, Tomoji; Kowata, Yasunori; Miwa, Nobuhiko
CS Cosmos, Nihon Surfactant Kogyo K. K., Tokyo, 174, Japan
SO Fragrance Journal (1997), 25(3), 71-79
CODEN: FUJAD7; ISSN: 0288-9803
PB Fureguransu Janaru Sha
DT Journal; **General Review**
LA Japanese
AB A review with 13 refs. 2,3,5,6-O-Tetra-2-hexyldecanoyl-L-ascorbic acid (VC-IP) is colorless clear liq., almost sol. in oily materials and thermally stable without deterioration in color. Esp., VC-IP is absorbed in human skin and can be used as skin lightening agent, besides it has SOD-like activity. Therefore, a new type of application for cosmetics has been derived from VC-IP with desired properties. Lipophilic derivs. of L-ascorbic acid monoacylated at the 6-OH site with palmitoyl or stearoyl group were endowed with the potentiated antitumor activity, which is attributable to generation of a diversity of reactive oxygen intermediates, enhancement of extracellular release of cell membrane-derived lipids and post-transcriptional inhibition of ornithine decarboxylase. 6-O-Palmitolylascorbate at doses as low as inducing no inhibition of cell growth inhibited tumor metastasis to the lung and tumor invasion through reconstituted basement membrane.

L53 ANSWER 184 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:423489 HCAPLUS
DN 129:183703
TI Multiple mechanisms of cancer prevention by phytochemicals: interaction between cellular proliferation and endogenous mutagens
AU Cooney, Robert V.; Mordan, Lawrence J.; Franke, Adrian
CS Cancer Research Center of Hawaii, University of Hawaii, Honolulu, HI, 96813, USA
SO Food Factors for Cancer Prevention, [International Conference on Food Factors: Chemistry and Cancer Prevention], Hamamatsu, Japan, Dec., 1995 (1997), Meeting Date 1995, 26-29. Editor(s): Ohigashi, Hajime. Publisher: Springer, Tokyo, Japan.
CODEN: 66HYAL
DT Conference; **General Review**

LA English
AB A review with 32 refs. The development of a neoplastic cell involves multiple genetic changes in various key genes, including tumor suppressor genes, oncogenes, or DNA repair genes. Increasingly, it is recognized that these genetic changes may be the result of mutations caused through the synergistic interaction between cellular proliferation and the endogenous generation of oxidative radicals, including nitrogen oxides and oxidative radicals, including nitrogen oxides and various oxygen radicals. Numerous phytochems. such as the tocopherols, carotenoids, flavonoids, monoterpenes, and ascorbate, among others, have been shown to prevent or delay the development of tumor cells in cell culture and in animal models, while epidemiol. evidence suggests that increased consumption of fruits and vegetables and their assocd. phytochems. is correlated with decreased cancer incidence. In vitro cell transformation models offer unique insights into not only the mechanisms of action for various dietary phytochems., but the process of carcinogenesis itself.
RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 185 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:233745 HCAPLUS
DN 126:311645
TI Functions of vitamin C in the cell. Enriching of intracellular ascorbate and the resultant diverse biological effects
AU Yamane, Takashi; Nagao, Norio; Miwa, Nobuhiko
CS Sch. Biosci., Hiroshima Prefect. Univ., Shobara, 727, Japan
SO Fragrance Journal (1997), 25(3), 7-19
CODEN: FUJAD7; ISSN: 0288-9803
PB Fureguransu Janaru Sha
DT Journal; **General Review**
LA Japanese
AB A review with 21 refs. Ascorbic acid-2-O-phosphate (Asc2P) was shown to be taken up into human skin keratinocyte or fibroblastic cells more efficiently than Asc-2-O-.alpha.-glucoside. Asc2P also markedly inhibited tumor metastasis and tumor invasion through reconstituted basement membrane via enriching of intracellular Asc after undergoing dephosphorylation. Invasion of tax gene-transfected fibroblastic cells was more markedly inhibited by Asc2P than that of the parent cells, suggesting attribution to efficient scavenging of endogenous reactive oxygen intermediates (ROI) by Asc2P. Post-ischemic reperfusional injuries of the liver or heart were also inhibited by Asc2P assuredly through scavenging of ROI generated at the initial stage. Thus Asc2P was superior to Asc or the other derivs. in terms of intracellular uptake, inhibition of tumor metastasis and prevention of post-ischemic perfusion injury.

L53 ANSWER 186 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:109734 HCAPLUS
DN 130:129966
TI Anticancer composition
IN Yang, Xuqing; Yin, Yingwu; Tang, Yueling; Zhang, Baochang; Yang, Zhenyun; Wang, Xiyao
PA Beijing Xingda Science System Co., Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 19 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1121832	A	19960508	CN 1994-103448	19940408
	CN 1056082	B	20000906		
PRAI	CN 1994-103448		19940408		

OS MARPAT 130:129966

AB A anticancer compn. comprises e.g. antagonist (4-tert-butyl-2,6-dimethylnitrobenzene) 20-60, GSH 1-5, sodium selenite 2-10, platinum or ferric complex of amino acids or peptides 0.1-0.5%, vitamin C or vitamin E, pollen and adjuvants. The compn. showed high and broad-spectrum effectiveness and was nontoxic.

L53 ANSWER 187 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:438017 HCAPLUS
DN 125:85490
TI Fodder and drinking water additive for improving the resistance to stress and immunity of useful animals
IN Erber, Erich
PA Ing. Erich Erber Kommanditgesellschaft, Austria
SO PCT Int. Appl., 18 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9615682	A1	19960530	WO 1995-AT224	19951121
	W: AU, BR, CA, CN, CZ, HU, JP, KR, MX, PL, RU, SG, SI, SK, VN				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	IL 115918	A1	19991231	IL 1995-115918	19951108
	ZA 9509716	A	19960529	ZA 1995-9716	19951115
	CA 2181365	AA	19960530	CA 1995-2181365	19951121
	AU 9538352	A1	19960617	AU 1995-38352	19951121
	EP 740509	A1	19961106	EP 1995-936377	19951121
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
	CN 1138821	A	19961225	CN 1995-191289	19951121
	HU 76362	A2	19970828	HU 1996-1974	19951121
	BR 9506556	A	19971028	BR 1995-6556	19951121
	CZ 285631	B6	19991013	CZ 1996-1974	19951121
	JP 11514205	T2	19991207	JP 1995-516376	19951121
PRAI	AT 1994-443	U	19941122		
	WO 1995-AT224	W	19951121		

AB The invention concerns a fodder and drinking water additive for improving the resistance to stress and immunity of useful animals. The additive comprises lysozyme and/or the pharmaceutically harmless salts thereof as the principal component and a peroxidase-contg. substance, in particular horseradish peroxidase. Vitamin E or another vitamin and lactoferrin or plant exts. may also be included in the compn.

L53 ANSWER 188 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:748583 HCAPLUS
DN 126:30589
TI Glutathione and antioxidant in food for controlling mental stress
IN Nakano, Takahisa; Kobayashi, Akio
PA Riken Vitamin Co, Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF

DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08275752	A2	19961022	JP 1995-108245	19950407
PRAI	JP 1995-108245		19950407		

AB A food contg. glutathione and .gtoreq. 1 antioxidants is found effective in decreasing mental stress. For example, a food contg. glutathione 5-100, vitamin C 10-2000, vitamin E 5-100, and .beta.-carotene 1-5 mg was given daily to adult, and its efficacy studied.

L53 ANSWER 189 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:432259 HCAPLUS
DN 125:141264
TI Effect of vitamin E and selenium on hypothermic restraint stress and chemically-induced ulcers
AU Al-Moutairy, Ahmad R.; Tariq, Mohammad
CS Dammam and Riyadh Military Hospital, King Faisal University, Riyadh, Saudi Arabia
SO Digestive Diseases and Sciences (1996), 41(6), 1165-1171
CODEN: DDSCDJ; ISSN: 0163-2116
PB Plenum
DT Journal
LA English
AB The present study was undertaken to det. the effect of a combination of selenium and vitamin E on stress and chem.-induced gastric ulcers in rats. The gastric mucosal lesions were produced by hypothermic restraint stress, indomethacin, reserpine, and mucosal damaging agents including 80% ethanol, 0.6 M HCl, 25% NaCl, and 0.2 M NaOH. The gastric secretion studies were undertaken using Shay's pylorus ligation model. The results of this study demonstrated that the treatment of rats with selenium or vitamin E significantly reduced the basal gastric acid secretions when given individually; however, the combination of these agents produced a better inhibition of gastric acid secretions as compared to their individual effect. Both selenium and vitamin E were found to protect gastric mucosa against the lesions produced by hypothermic restraint stress and chems., but a highly significant protection was obsd. when they were used concomitantly. Vitamin E alone and with selenium significantly inhibited ethanol-induced depletion of gastric nonprotein sulfhydryl compds. Our findings also showed that the combination of selenium and vitamin E provided better protection to gastric mucosa against hypothermic restraint-induced gastric wall mucus depletion. This study clearly suggests the feasibility of using selenium and vitamin E concurrently to achieve better gastroprotective effects.

L53 ANSWER 190 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:298651 HCAPLUS
DN 126:304155
TI Biological consequences of hypoxic stress on working dogs. Licancabur-Chiens des cimes. Chile april 1996 scientific expedition
AU Grandjean, D.; Driss, F.; Sergheraert, R.; Valette, J. P.; Michel, A.; Luigi, R.
CS Unite Medecine l'Elevage Sport Ecole Nationale Veterinaire d'Alfort, Brigade Sapeurs Pompiers Paris, Maisons-Alfort, F-94704, Fr.
SO Recueil de Medecine Veterinaire (1996), 172(11/12), 601-621
CODEN: RMVEAG; ISSN: 0034-1843

PB Association pour la Publication du Recueil de Medecine Veterinaire
DT Journal
LA French
AB Scientific literature provides numerous informations concerning the biol. effects of altitude hypoxia in Humans, but none in dogs. The aim of the present study was to consider search and rescue dogs working at an altitude of more than 5 000 m, without any acclimatation period, as a model for cellular hypoxic stress. All racing dogs, and esp. sled dogs, are facing a high level of metabolic stress, including cellular hypoxia related to vasoconstriction problems and/or lack or oxygen transportation to deep muscle cells. The .mchlt.Licancabur-Chiens des cimes.mchgt. expedition was organized in Apr. 1996 in Chile ; the main reason for this choice is that the volcano Licancabur (Atacama desert, north of Chile) culminates at 5 980 m in altitude and can be reached, for its lower part (4 600 m) in less than 24 h after leaving France. This allowed the expedition to be in high altitude without any acclimatation time, enhancing the biol. effects of acute of acute altitude hypoxia. Members of the expedition were: -5 search and rescue teams form the Paris Fire Department (military unit); -5 search and rescue teams from the Carabinieros de Chile (military unit); -1 MD, 1 Vet (authors) and 2 dog behavior specialist from La Sorbonne University Paris; -12 other people in charge of the practical organization, including specialized guides. To study the effects of nutrition on the hypoxic stress related modifications, the dogs were divided into the group: -5 dogs received a std. dry food, non premium maintenance type; -5 dogs received a high stress diet basicly designed for racing sled dogs, a premium 35/25 dry food, supplemented with vitamins E and C, and with omega 3 fatty acids. Observations and blood samples have been realized at the following levels of altitude: -sea level; -2 300 m (San Pedro de Atacama); -4 500 m (base camp); -5 750 m (max. altitude reached). At each level of altitude the dogs have been working by having to search 2 victims in local Inca ruins, before beeing sampled. Blood sampled have been immediately centrifuged and frozen, except for the quantities necessary to on site analyses. Back to Paris, the following parameters have been analyzed: -membrane resistance to lipoperoxydation in tertiobutylperoxyde; -blood free fatty acids; -blood alkanes; -blood vitamins E and C; -plasma cortisol; -plasma antioxidant trace elements. The results of the present protocol clearly demonstrate the interest of an antioxydant supplementation in such hypoxic conditions. They also show that stamina in acute hypoxia is a good spontaneous model for cellular oxidative stress, also involved in elderness process, in some cardiovascular pathologies, in tumors proliferation and in... sport physiol. On a practical point of view we were also able to better understand and prevent in the future the consequences of acute mountain sickness in working dogs. Following the first expedition will be other ones already scheduled and starting in 1998, on top of the Aconcagua in Argentina.

L53 ANSWER 191 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:564895 HCAPLUS
DN 125:246261
TI Vitamin C and common cold incidence: A review of studies with subjects under heavy physical stress
AU Hemila, H.
CS Department Public Health, University Helsinki, Finland
SO International Journal of Sports Medicine (1996), 17(5), 379-383
CODEN: IJSMDA; ISSN: 0172-4622
PB Thieme

DT Journal
LA English
AB Several studies have obsd. an increased risk of respiratory infections in subjects doing heavy phys. exercise. Vitamin C has been shown to affect some parts of the immune system, and accordingly it seems biol. conceivable that it could have effects on the increased incidence of respiratory infections caused by heavy phys. stress. In this report the results of three placebo-controlled studies that have examd. the effect of vitamin C supplementation on common cold incidence in subjects under acute phys. stress are analyzed. In one study the subjects were school-children at a skiing camp in the Swiss Alps, in another they were military troops training in Northern Canada, and in the third they were participants in a 90 km running race. In each of the three studies a considerable redn. in common cold incidence in the group supplemented with vitamin C (0.6-1.0 g/day) was found. The pooled rate ratio (RR) of common cold infections in the studies was 0.50 (95% Cl: 0.35-0.69) in favor of vitamin C groups. Accordingly, the results of the three studies suggest that vitamin C supplementation may be beneficial for some of the subjects doing heavy exercise who have problems with frequent upper respiratory infections.

L53 ANSWER 192 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:138687 HCAPLUS
DN 124:259309
TI Vitamin E and cancer prevention
AU Liang, Bailin; Wang, James Y.; Watson, Ronald R.
CS AHSC, Tucson, AZ, USA
SO Nutrition and Cancer Prevention (1996), 283-97. Editor(s): Watson, Ronald Ross; Mufti, Siraj I. Publisher: CRC, Boca Raton, Fla.
CODEN: 62KRAL
DT Conference; **General Review**
LA English
AB A review with 93 refs. on vitamin E antioxidant and immunoenhancing therapeutic roles in animal and human cancer.

L53 ANSWER 193 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:138685 HCAPLUS
DN 124:259307
TI Tumor prevention by vitamin c in animals
AU Liehr, Joachim G.; Winter, Mark L.
CS Department Pharmacology and Toxicology, University Texas Medical Branch, Galveston, TX, USA
SO Nutrition and Cancer Prevention (1996), 239-56. Editor(s): Watson, Ronald Ross; Mufti, Siraj I. Publisher: CRC, Boca Raton, Fla.
CODEN: 62KRAL
DT Conference; **General Review**
LA English
AB A review with 98 refs. on ascorbic acid's beneficial and adverse effects in vivo and in vitro in relation to its influence on tumor induction and cell transformation and mutagenesis.

L53 ANSWER 194 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:233895 HCAPLUS
DN 124:315579
TI Vitamin E and stress
AU Hirahara, Fumiko
CS Div. Food Sci., Natl. Inst. Health Nutrition Res., Japan
SO Rinsho Kensa (1996), 40(2), 218-19

CODEN: RNKNAT; ISSN: 0485-1420
PB Igaku Shoin
DT Journal; General Review
LA Japanese
AB A review with 7 refs. on the physiol. activities of vitamin E in coping stresses. The physiol. activities of vitamin E comprises antioxidative activity, free radical-removing activity, prevention of carcinogenesis, and stimulation of immunoactivity.

L53 ANSWER 195 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:138684 HCAPLUS
DN 124:259306
TI Vitamin C and cancer prevention: An assessment of analytic studies in humans
AU Rogers, Mary A. M.; Thomas, David B.
CS Health Science Center, State University New York, Syracuse, NY, USA
SO Nutrition and Cancer Prevention (1996), 205-37. Editor(s): Watson, Ronald Ross; Mufti, Siraj I. Publisher: CRC, Boca Raton, Fla.
CODEN: 62KRAL
DT Conference; **General Review**
LA English
AB A review with 156 refs. on ascorbic acid's role in cancer prevention.

L53 ANSWER 196 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:720515 HCAPLUS
DN 126:7025
TI Chemoprevention trial on precancerous lesions of the stomach in Venezuela: Summary of study design and baseline data
AU Munoz, N.; Vivas, J.; Buiatti, E.; Kato, I.; Oliver, W.
CS Unit Field Intervention Studies, International Agency Res. Cancer, Lyon, Fr.
SO IARC Scientific Publications (1996), 139(Principles of Chemoprevention), 125-133
CODEN: IARCCD; ISSN: 0300-5038
PB International Agency for Research on Cancer
DT Journal
LA English
AB A double-blind, placebo-controlled trial is being conducted in a population at high risk for gastric cancer in Venezuela. The main aim of the trial is to assess the effect of antioxidant vitamins (.beta.-carotene, vitamin C, and vitamin E) in blocking the progression of precancerous lesions of the stomach. Within the framework of a screening program for stomach cancer, 2200 subjects of 35-69 yr of age have been recruited. At study entry, a dietary questionnaire was completed, and gastroscopy with the collection of 7 gastric biopsies was performed. After baseline examns., the study participants were randomized to receive antioxidant treatment or placebo for 3 yr. The treatment phase will be completed in mid-1998. At the end of the treatment phase, the investigations performed at study entry will be repeated. Before the initiation of the trial, various pilot studies were carried out that showed an extremely high prevalence of Helicobacter pylori infection (>90%). Two eradication trials using anti-H. pylori treatments that give good results in Europe and North America gave very poor results in this study population. The low eradication rates achieved (5-20%) suggest a high prevalence of antibiotic-resistant H. pylori strains or high reinfection rates. These disappointing results led to deletion of an anti-H. pylori treatment phase of the main trial.

L53 ANSWER 197 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:656630 HCAPLUS
DN 127:314706
TI Effect of relanium and of feeding with vitamins C and B6 on certain physiological and biochemical indexes of calves
AU Aituganov, M. D.; Von Korokhova, V.; Ysmanbaeva, A.; Zakirov, D.
CS IBF, NAN KR, Kyrgyzstan
SO Ekho Nauki (1996), (1), 70-73
CODEN: EKNAFG
PB Ilim
DT Journal
LA Russian
AB Relanium is shown to be an effective prophylactic against transport stress and sunstroke in calves. Feed supplementation with vitamins C and B6 help prevent loss of body mass.

L53 ANSWER 198 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:760256 HCAPLUS
DN 126:30781
TI Antioxidants improve cattle immunity following stress
AU Nockels, Cheryl F.
CS Dept. of Animal Sciences, Colorado State Univ., Fort Collins, CO, 80523, USA
SO Animal Feed Science and Technology (1996), 62(1), 59-68
CODEN: AFSTDH; ISSN: 0377-8401
PB Elsevier
DT Journal
LA English
AB Free radical and nonfree radical oxidants can produce damaging effects in animal tissues if antioxidants are deficient. These oxidants are produced during metab. and may be substantially increased by aerobic exercise, stress, tissue injury, infection, and detoxification of many compds. Stress may precede an infectious episode in animals by decreasing antioxidants needed later by an active immune response. Antioxidant nutrients such as vitamin E, .beta.-carotene and the trace elements selenium, copper, zinc and manganese in enzymes are very important in protecting an animal's tissues from oxidative destruction. This protective benefit also results in an improved immune response which decreases mastitis in dairy cows and infectious disease incidences arising in stressed cattle following shipping. The amt. of nutrients needed for immunoenhancement is higher than the suggested required amt. by NRC.

L53 ANSWER 199 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:311817 HCAPLUS
DN 125:26037
TI The influence of various vitamin on physiologic and psychologic response to stress
AU Shioiri, Terue; Iijama, Yumiko; Saitou, Reiko; Mita, Reizou; Inaba, Yumi; Ooshima, Yukiko; Tomabechi, Kounosuke
CS Tokyo Kasei Univ., Japan
SO Kenkyu Kiyo - Tokyo Kasei Daigaku, 2: Shizen Kagaku (1996), 36(2), 59-65
CODEN: KKSKFZ; ISSN: 0385-1214
PB Tokyo Kasei Daigaku
DT Journal
LA Japanese
AB The influence of various vitamin on physiol. and psychol. response to

stress was studied in college female students. The results indicated that vitamin supplements esp. .beta.-carotene and vitamin C are helpful for coping with stress.

L53 ANSWER 200 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:524789 HCAPLUS
DN 127:175785
TI Differential effect of .alpha.-tocopherol and ascorbate on oxidative injury induced in immune cells by thermal stress
AU Franci, O.; Ranfi, F.; Scaccini, C.; Amici, A.; Merendino, N.; Tommasi, G.; Piccolella, E.
CS Centro Interuniversitario di Immunodiagnostica Sperimentale, Italy
SO Journal of Biological Regulators and Homeostatic Agents (1996), 10(2/3), 54-59
CODEN: JBRAER; ISSN: 0393-974X
PB Wichtig
DT Journal
LA English
AB As immune cells are often subjected to hyperthermia that can easily occur either after intense and/or prolonged exercise or during defense against pathogens, in this paper we analyzed whether superoxide anion prodn. occurred in lymphocytes exposed to high temp. and, consequently, if antioxidants could exert any protective function. An increase of superoxide anion was induced in rabbit lymphocytes exposed to 42.degree.C for 1h, although cell viability was not affected. However, suppression of either Pokeweed mitogen (PWM)-driven cell proliferation, or Ig prodn. or IL-2 synthesis was obsd. To evaluate the capacity of antioxidants to restore the immune suppressed responses, two vitamins, .alpha.-tocopherol and ascorbic acid, were added to PWM-stimulated cultures following heat treatment. The data demonstrated that .alpha.-tocopherol was able to totally abrogate the inhibitory effects mediated by thermal stress, while ascorbic acid did not give any protective results.

L53 ANSWER 201 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:234393 HCAPLUS
DN 126:249440
TI Stress effect on lipid peroxidation and physico-chemical state of membranes of endoplasmic reticulum of the liver of adult and old rats
AU Paramonova, G. I.; Gubskii, Yu. I.; Goryushko, A.G.; Levitskii, E. L.; Primak, R. G.
CS Inst. Gerontol., AMN Ukrainy, Kiev, Ukraine
SO Ukrainskii Biokhimicheskii Zhurnal (1996), 68(5), 47-53
CODEN: UBZHD4; ISSN: 0201-8470
PB Naukova Dumka
DT Journal
LA Russian
AB As a result of expts. carried out on adult (6-8 mo) and old (24-26 mo) male rats of the Wistar line it is established that emotional-pain stress results (in one day) in essential increase in the activity of spontaneous, NADPH - and ascorbate-dependent peroxidn. of lipids in the liver microsomes, which is expressed in the old animals rather than in the adult ones. The induced peroxidn. of lipid six days after the stress effect remains activated in the adult rats and decreases to the control level in the old ones. Accumulation of lipid peroxidn. products in the membrane structure of hepatocytes is accompanied by the changes of physicochem. parameters of microsomal membranes, microviscosity and surface potential in particular. Availability of conformational shifts of membrane proteins

of microsomes under the conditions of activation of lipid peroxidn. evoked by the stress is accompanied by changes of physico-chem. parameters of microsomal membranes. Changes in the membrane structure are expressed to the less extent in the microsomes of old rats liver as well, that evidences for the age-dependent differences of adaptational capacities of the organism.

L53 ANSWER 202 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:408047 HCAPLUS
DN 125:85302
TI Effects of dietary copper, chromium, and vitamin e on measures of stress and immune competence in growing cattle
AU Arthington, John David
CS Kansas State Univ., Manhattan, KS, USA
SO (1995) 135 pp. Avail.: Univ. Microfilms Int., Order No. DA9614249
From: Diss. Abstr. Int., B 1996, 57(1), 6
DT Dissertation
LA English
AB Unavailable

L53 ANSWER 203 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:155612 HCAPLUS
DN 124:194302
TI Treatment of proliferative disorders, metastases, and drug resistant tumors with vanadate compounds and derivatives or analogs thereof
IN Cruz, Tony
PA Mount Sinai Hospital Corp., Can.
SO Can. Pat. Appl., 46 pp.
CODEN: CPXXEB
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CA 2113683	AA	19950719	CA 1994-2113683	19940118
PRAI CA 1994-2113683		19940118		

AB Vanadate compds. or derivs. or analogs are useful as antiproliferative and anti-metastatic agents, and/or for the treatment of drug resistant tumors in animals. Mice were injected s.c. with 1x105 MDAY-D2 cell in day 1, and on day 5 small tumors could be obsd. at the site of the injection. Mice were then injected daily with 50.mu.L of 10mg/m orthovanadate (I). On day 14, the mice were sacrificed and the tumors were removed and weighed. Animals treated with I had tumors which were either undetectable or considerably smaller than controls.

L53 ANSWER 204 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:69186 HCAPLUS
DN 124:144355
TI Evidence from cancer intervention and biomarker studies and the development of biochemical markers
AU Bowen, Phyllis E.; Mobarhan, Sohrab
CS Department Human Nutrition and Dietetics, University Illinois, Chicago, IL, 60612, USA
SO American Journal of Clinical Nutrition (1995), 62(6, Suppl.), 1403S-9S
CODEN: AJCNAC; ISSN: 0002-9165
PB American Society for Clinical Nutrition
DT Journal; **General Review**

LA English
AB A review with 54 refs. regarding evidence from intervention trials with vitamins E and C and .beta.-carotene as well as evidence from trials that have used intermediate endpoints with a special emphasis on biomarkers of cancer of the colorectum.

L53 ANSWER 205 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:69184 HCAPLUS
DN 124:144353
TI Epidemiologic evidence for vitamin C and vitamin E in cancer prevention
AU Byers, Tim; Guerrero, Nicole
CS National Center Chronic Disease, Centers Disease Control and Prevention, Atlanta, USA
SO American Journal of Clinical Nutrition (1995), 62(6, Suppl.), 1385S-92S
CODEN: AJCNAC; ISSN: 0002-9165
PB American Society for Clinical Nutrition
DT Journal; **General Review**
LA English
AB A review with 113 refs. on epidemiol. evidence regarding the question of specificity of effects of vitamin C and vitamin E for cancer prevention.

L53 ANSWER 206 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:514507 HCAPLUS
DN 122:264212
TI The effects of heat distress environment, vitamin, and trace mineral supplementation on performance, blood constituents, and tissue mineral concentrations in broiler chickens
AU Deyhim, Farzad; Stoecker, Barbara S.; Adeleye, Bernece G.; Teeter, Robert G.
CS Department of Animal Science, Oklahoma State University, Stillwater, OK, 74078, USA
SO Nutrition Research (New York, NY, United States) (1995), 15(4), 521-6
CODEN: NTRSDC; ISSN: 0271-5317
DT Journal
LA English
AB An investigation was carried out to det. the effects of heat distress environment and dietary vitamin and/or trace mineral supplementation on broilers from 28 to 49 days of age. Variables monitored included prodn. criteria, serum metabolites, and gastrocnemius muscle and spleen Na, Ca, Mg, Fe, and Zn concns. Heat distress reduced wt. gain, feed efficiency, serum total protein, albumin, triglyceride, uric acid, and it did not affect muscle and spleen trace mineral concns., but it increased serum glucose concn. Broiler wt. gain and feed efficiency decreased with trace mineral supplementation only. While, wt. gain and feed efficiency numerically increased with vitamin supplementation only, and significantly increased with vitamin plus trace mineral supplementation. Serum total protein and albumin decreased with trace mineral and/or vitamin supplementation. Other variables were not affected with the dietary treatments. In conclusion, optimal broiler growth rate and feed efficiency depends on certain trace mineral by vitamin interactions.

L53 ANSWER 207 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:844627 HCAPLUS
DN 123:284326
TI Inhibition and regression of experimental oral cancer by beta carotene and vitamin E: Emerging concepts
AU Shklar, Gerald

CS Harvard School Dental Medicine, Boston, MA, 02115, USA
SO Nutrients in Cancer Prevention and Treatment (1995), 317-32. Editor(s): Prasad, Kedar N.; Santamaria, Leonida; Williams, R. Michael. Publisher: Humana, Totowa, N. J.
CODEN: 61SWAZ
DT Conference; **General Review**
LA English
AB A review with 60 refs. on cancer prevention in relation to dietary .beta.-carotene and vitamin E.

L53 ANSWER 208 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:844624 HCAPLUS
DN 123:284325
TI Beta-carotene and antioxidant nutrients in oral cancer prevention
AU Garewal, Harinder
CS VA Medical Center, University Arizona, Tucson, AZ, 85723, USA
SO Nutrients in Cancer Prevention and Treatment (1995), 235-47. Editor(s): Prasad, Kedar N.; Santamaria, Leonida; Williams, R. Michael. Publisher: Humana, Totowa, N. J.
CODEN: 61SWAZ
DT Conference; **General Review**
LA English
AB A review with 36 refs. on .beta.-carotene and vitamin E nutrition in relation to oral cancer prevention.

L53 ANSWER 209 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:594037 HCAPLUS
DN 123:54732
TI Influence of .beta.-carotene and vitamin C on physiologic and psychologic responses to stress
AU Iijima, Yumiko; Soeno, Naoko; Inomata, Michiko; Shiori, Terue; Saitou, Reiko; Kimoto, Kouichi; Tomabechi, Kounosuke; Mita, Reizou; Inoue, Kikuko; et al.
CS Tokyo Kasei Univ., Tokyo, 173, Japan
SO Eiyogaku Zasshi (1995), 53(2), 93-102
CODEN: EYGZAD; ISSN: 0021-5147
PB Kokumin Eiyo Shinkokai
DT Journal
LA Japanese
AB We investigated the influence of the dietary factors, vitamin C and .beta.-carotene in green/yellow vegetables, on psychol. responses to stress. Stress comprising calcn. of math problems for 6 consecutive hours/day was applied on the 5th and 6th days resp. The 3 groups were provided with the same diet during the first 6 days (the first stage), but the diet was supplemented with 30 mg of .beta.-carotene for group .beta., 300 mg of ascorbic acid for group C and placebo of safflower oil for group P during the last six days (the last stage). In the first stage, the no. of subjective symptoms increased with loading of stressors when the calcn. tasks was done. In the last stage, the subjective symptoms increased in group P similarly, but in groups .beta. and C, the symptoms reduced, esp. in group .beta.. The plasma concn. of .beta.-carotene decreased in the first stage in all the groups. In the last stage, the .beta.-carotene concn. also decreased except in group .beta. whose diet was supplemented with .beta.-carotene. The plasma concn. and urinary excretion of vitamin C did not change in the first stage when they had 100 mg of vitamin C in the diet (calcd. value), but in the last stage, both concns. in group C notably increased with the intake. Urinary noradrenaline and adrenaline

excretions increased in the first stage and both concns. temporarily decreased before loading next stressors in the last stage, but significantly increased with loading of the stressors. Group .beta. showed a remarkable increase compared to other groups.

L53 ANSWER 210 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:949490 HCAPLUS
DN 124:85491
TI Induction of NAD(P)H:quinone reductase by vitamins A, E and C in Colo205 colon cancer cells
AU Wang, Weiqun; Higuchi, Carl M.
CS Prevention and Control Program, Cancer Research Center of Hawaii, University of Hawaii, 1236 Lauhala Street, Honolulu, HI 96813, USA
SO Cancer Letters (Shannon, Ireland) (1995), 98(1), 63-9
CODEN: CALEDQ; ISSN: 0304-3835
PB Elsevier
DT Journal
LA English
AB High consumption of fruits and vegetables which are abundant in dietary antioxidants has been linked to a reduced incidence of colorectal cancer. A potential mechanism of dietary anticarcinogenesis involves the induction of detoxifying phase II enzymes, including NAD(P)H:quinone reductase (QR) and glutathione-S-transferase (GST). This study therefore examd. the ability of the dietary antioxidant vitamins .beta.-carotene, .alpha.-tocopherol and ascorbic acid to induce cellular expression of QR and GST activities in human colon cancer cells. Colo205 cells were cultured in the presence or absence of various concns. (10-10 to 10-5 M) of each antioxidative micronutrient, then assessed for cytosolic QR and GST activities and cell growth. .beta.-Carotene, .alpha.-tocopherol and ascorbic acid each resulted in dose-dependent increases in QR activity, without adverse effects upon cell proliferation. To investigate whether the ability of .beta.-carotene to induce QR may be attributable to its conversion to vitamin A and/or to its antioxidant capacity as a carotenoid, retinol, retinoic acid, and lycopene were similarly tested for their capacity for enzyme induction. Although retinol and retinoic acid were both noted to be antiproliferative at higher concns. (10-6 to 10-5 M), both retinoids stimulated QR at physiol. concns. Lycopene, a carotenoid which is not converted to vitamin A, was devoid of biol. activity. By contrast with the effects upon QR, GST activity was unaffected by treatment with any of the micronutrients tested in this in vitro model. The results support a hypothesis that a high dietary consumption of vitamins A, E and C may confer partial protection against colorectal cancer by the induction of specific detoxifying enzymes. The antioxidant capacity of .beta.-carotene appears to have less biol. impact vis-a-vis QR induction than its function as a non-toxic reservoir of vitamin A. Measurements of QR activity within the colorectal mucosa may provide an index of cancer susceptibility, and may be an appropriate surrogate endpoint biomarker for colorectal cancer prevention studies involving diet modification or specific relevant micronutrients.

L53 ANSWER 211 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:204910 HCAPLUS
DN 124:256250
TI Corticosterone level in blood of meat turkeys after application of vitamin E and selenium before the pre-slaughter handling
AU Sowinska, Janina; Filus, Kazimierz; Gierczynski, Slawomir; Wojcik, Anna
CS Dep. Zoological Hygiene, Univ. Agric. Technol., Olsztyn, Pol.

SO Acta Academiae Agriculturae ac Technicae Olstenensis: Zootechnica (1995), 503(44), 55-60
CODEN: AATZE6; ISSN: 0860-2603
PB Wydawnictwo ART
DT Journal
LA Polish
AB Vitamin E and Se were used to lessen the pre-slaughter stress in meat turkeys. Administration of L-tocopherol and Na2SeO4 resulted in decrease of corticosterone level in the birds. The corticosterone level was detd. by the radiocompetitive methods.

L53 ANSWER 212 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:692722 HCAPLUS
DN 124:13
TI Antioxidants and cancer
AU Stoll, Guenther
CS Filderstadt, D-70794, Germany
SO Deutsche Apotheker Zeitung (1995), 135(24), 35-8, 40
CODEN: DAZEA2; ISSN: 0011-9857
PB Deutscher Apotheker Verlag
DT Journal; **General Review**
LA German
AB A review, with 7 refs. on the role of vitamins as antioxidants in disease prevention and the new knowledge on their influence, esp. vitamin C and E in cancer prevention by regulating genetic expression. The antioxidative mechanism of vitamins against free radicals is also described.

L53 ANSWER 213 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:288224 HCAPLUS
DN 122:54907
TI Effectiveness of short-term cooling and vitamin E for alleviation of infertility induced by heat stress in dairy cows
AU Ealy, Alan D.; Arechiga, Carlos F.; Bray, David R.; Risco, Carlos A.; Hansen, Peter J.
CS Dep. Dairy Poultry Sci., Univ. Florida, Gainesville, FL, 32611, USA
SO Journal of Dairy Science (1994), 77(12), 3601-7
CODEN: JDSCAE; ISSN: 0022-0302
PB American Dairy Science Association
DT Journal
LA English
AB Four expts. were performed to det. whether cooling cows during final maturation of oocytes and early embryonic development or injection of vitamin E at artificial insemination prevented adverse effects of heat stress on pregnancy rates in lactating Holstein dairy cows. In expt. 1, cows were placed in a cooling facility contg. sprinklers and forced ventilation or received shade only from 2-3 days before until 5-6 days after breeding. Although cooling had no effect on detection of estrus, pregnancy rates were increased slightly for cooled cows (8 of 50 cows; 16.0%) compared with those for cows exposed to shade only (2 of 32 cows; 6.2%). In expts. 2 through 4, cows were administered 3000 IU of vitamin E or placebo i.m. at artificial insemination during 2 consecutive summers and 1 winter in Florida. Administration of vitamin E had no consistent beneficial effect on pregnancy rates during summer or winter. Short-term cooling improved pregnancy rates slightly in heat-stressed cows, but administration of vitamin E had no beneficial effects on pregnancy rates during heat stress. Further improvements in cooling schemes during early pregnancy and delineation of antioxidant effects are necessary before such

systems become practical for improvement of fertility in heat-stressed dairy cows.

L53 ANSWER 214 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:370562 HCAPLUS
DN 122:159300
TI Newer aspects of micronutrients in chronic disease: Vitamin E
AU Morrissey, P. A.; Quinn, P. B.; Sheehy, P. J. A.
CS Department Nutrition, University College, Cork, Ire.
SO Proceedings of the Nutrition Society (1994), 53(3), 591-82
CODEN: PNUSA4; ISSN: 0029-6651
DT Journal; **General Review**
LA English
AB A review with 53 refs. on the chem. and esp. antioxidant activity of vitamin E and its involvement as a protective agent for membranes and against cancer, cardiovascular disease, and other disorders.

L53 ANSWER 215 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:333575 HCAPLUS
DN 122:233441
TI Vitamin C - structure, chemical reactivity and biological activity
AU Eckert-Makisic, M.; Maksic, Z. B.; Osmak, M.; Pavelic, K.
CS Dept. Chem., Rudjer Boskovic Inst., Zagreb, Croatia
SO Kemija u Industriji (1994), 43(12), 461-73
CODEN: KJUIAR; ISSN: 0022-9830
PB Hrvatsko Drustvo Kemijskih Inzenjera i Tehnologa
DT Journal; **General Review**
LA Serbo-Croatian
AB A review, with 87 refs., of the structure, stability, electronic properties, chem. and biol. activities of vitamin C (L-ascorbic acid, AA). Theor. methods employed in elucidating structural and electronic features encompass semiempirical MINDO/3, MNDO and AM1 schemes, as well as some most recent ab initio procedures. Theor., predicted structures of the most stable AA tautomer and radical AA- are in accordance with empirical knowledge. It appears also that AA- is thermodynamically more stable than the parent mol. AA. Partitioning of the total mol. energy shows that enhanced thermodn. stability of AA- is to be ascribed to increased bond energies of two addnl. C=O groups. However, AA- is more reactive at the same time because of the presence of the unpaired electron and the high orbital energy of SOMO. Maxima of the unpaired spin d. are found on oxygen atoms of the carbonyl-groups attached to the ring. It has been found that the side chain has a very little influence on geometry of the ring and its chem. properties. Biol. activity of ascorbic acid is discussed in some detail. Its role in collagen synthesis, strengthening of the immune system and in prevention of numerous diseases is reviewed. It appears that vitamin C has a pronounced antioxidant activity which is synergistically enhanced by the presence of vitamin E. Hence, it quenches a no. of harmful free-radicals thus ameliorating the oxidative stress taking place in various diseases and slowing down the aging process. It also provides considerable protection against some cardiovascular illnesses, which is enhanced in conjunction with vitamin E. Finally, we discuss results of several expts. carried out in vivo and in vitro at the Ruder Boskovic Institute designed in order to elucidate inhibitory action of AA and its derivs. on the proliferative capacity of some malignant cell lines. For this purpose we introduced a new concept of the modified orthomol., 6-bromo-6-deoxy-, 6-chloro-6-deoxy and 6-amino-6-deoxy being pseudo-orthomols. par excellence. It has been shown that these AA derivs.

exhibit a pronounced anticancer activity for some malignant neoplasia. The best results are obtained in vitro for the human cell lines: cervix cancer (HeLa), laryngeal cancer (Hep2), breast cancer (SKBR3) and pancreatic cancer (MIA-Pa-Ca-2). The no. of malignant cells of the latter tumor is dramatically decreased by appropriate treatment with 6-amino-6-deoxy-ascorbic acid. It has been established that the mechanism of action of the latter compd. is apoptosis, i.e. the programmed cell death. Our results are encouraging and illustrate rather nicely that the idea of the modified orthomol. opens up a new avenue in cancer research.

L53 ANSWER 216 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:472784 HCAPLUS
DN 122:264160
TI Vitamin E and cancer prevention
AU Knekt, Paul
CS Research and Development Centre, Social Insurance Institution, Helsinki, 00380, Finland
SO Nat. Antioxid. Hum. Health Dis. (1994), 199-238. Editor(s): Frei, Balz. Publisher: Academic, San Diego, Calif.
CODEN: 60TYA7
DT Conference; **General Review**
LA English
AB A review with 201 refs. on the anticancer effects of vitamin E.

L53 ANSWER 217 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1994:699801 HCAPLUS
DN 121:299801
TI Effect of vitamin E injection on cortisol and white blood cell response to surgical stress in dairy cows
AU Mudron, P.; Scholz, H.; Sallmann, H. P.; Rehage, J.; Kovac, G.; Bartko, F.; Hoeltershinken, M.
CS Clinic of Internal Med., Veterinary Univ., Kosice, 08141, Slovakia
SO International Journal for Vitamin and Nutrition Research (1994), 64(3), 176-80
CODEN: IJVNAP; ISSN: 0300-9831
DT Journal
LA English
AB Abdominal surgery (omentopexy) was carried out in order to correct a left abomasal displacement in 20 dairy cows. Ten hours prior to surgery 10 cows were injected i.m. with 10 mg dl-.alpha.-tocopheryl acetate per kg body wt. Ten cows (controls) received an equiv. vol. of injectable water. Over a 72 h period plasma samples were collected. In 8 cows (4 cows from each group) .alpha.-tocopherol in liver tissue was detd. Plasma vitamin E concns. were significantly higher in vitamin E injected cows than in controls in all of the samples after the vitamin E injections. Similarly, liver .alpha.-tocopherol concns. were significantly higher in vitamin E injected cows than in controls. The surgical stress led to profoundly increased plasma cortisol levels and leucocytosis due to neutrophilia within 5 h after the surgery. Plasma cortisol levels as well as leukocyte counts were not affected by route of vitamin E administration used.

L53 ANSWER 218 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:341939 HCAPLUS
DN 122:131785
TI Performance and humoral immune response in heat-stressed broilers fed an ascorbic acid supplemented diet
AU Tuekam, T.D.; Miles, R.D.; Butcher, G.D.

CS Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL, 32611-0930, USA
SO Journal of Applied Animal Research (1994), 6(2), 121-30
CODEN: JANREH; ISSN: 0971-2119
DT Journal
LA English
AB A six-week expt. was conducted to investigate the influence of supplemental dietary ascorbic acid (AA) on body wt., feed consumption, feed conversion and the humoral immune response of broilers exposed to heat stress and inoculated with an inactivated vaccine strain of avian infectious bronchitis virus (IBV). The four treatment groups consisted of a control group under no heat stress and receiving no AA supplementation and three groups consisting of birds maintained at 32C and fed a diet supplemented with 0,500 or 1000 ppm AA. Ascorbic acid supplementation in heat-stressed groups did not improve the body wt. compared with the heat-stressed, unsupplemented birds. Feed consumption was improved for the heat-stressed birds receiving 1000 ppm AA compared with heat-stressed, but no AA supplementation. At the concn. of 1000 ppm AA, feed conversion was not significantly different from that obsd. for the control birds. As the concn. of AA supplementation increased, the relative wt. of the bursa of Fabricius also increased. During heat stress, birds supplemented with 500 ppm AA developed increased IBV antibody titers. The serum corticosterone concn. was lowered in these birds. There was a pos. correlation (r2=.95) between antibody titers and AA concn. and a neg. correlation (r2=.54) between the serum corticosterone concn. and the antibody titers.

L53 ANSWER 219 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1994:400005 HCAPLUS
DN 121:5
TI Vitamin E and cancer prevention, human evidence
AU Knekt, Paul
CS Res. Inst. Soc. Secur., Soc. Insurance Inst., Helsinki, SF-00381, Finland
SO Vitam. E (1993), 345-56. Editor(s): Mino, Makoto. Publisher: Jpn. Sci. Soc. Press, Tokyo, Japan.
CODEN: 59SHAZ
DT Conference; **General Review**
LA English
AB A review with 60 refs.

L53 ANSWER 220 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1993:538132 HCAPLUS
DN 119:138132
TI Human data on vitamin E and cancer
AU Knekt, Paul
CS Res. Inst. Soc. Secur., Soc. Insur. Inst., Helsinki, SF-00381, Finland
SO Pennington Center Nutrition Series (1993), 3(Vitamins and Cancer Prevention), 270-87
CODEN: PCNSEW; ISSN: 1063-8822
DT Journal; **General Review**
LA English
AB A review with 75 refs. on human studies indicating the ability of vitamin E to protect against various types of cancer.

L53 ANSWER 221 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1994:629513 HCAPLUS
DN 121:229513

TI Effect of ascorbic acid supplementation on blood composition of chickens exposed to heat stress
AU Sahota, Abdul Waheed; Gilani, Abrar Hussain; Fahim-Ullah, Muhammad
CS Poultry Res. Inst., Rawalpindi, Pak.
SO Pakistan Journal of Science (1993), 45, 21-30
CODEN: PAJSAS; ISSN: 0030-9877
DT Journal
LA English
AB Lyallpur Silver Black and White Leghorn chicks and laying pullets subjected to heat stress (30.degree. for 2 wk and then 39.degree. for 6 wk) showed reduced blood glucose and citric acid and serum cholesterol levels when supplemented with 50 or 100 mg ascorbic acid/kg feed, as compared with unsupplemented controls.

L53 ANSWER 222 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1993:49 HCAPLUS
DN 118:49
TI Vitamin E and cancer prevention: recent advances and future potentials
AU Prasad, Kedar N.; Edwards-Prasad, Judith
CS Sch. Med., Univ. Colorado, Denver, CO, 80262, USA
SO Journal of the American College of Nutrition (1992), 11(5), 487-500
CODEN: JONUDL; ISSN: 0731-5724
DT Journal; **General Review**
LA English
AB A review with 116 refs.

L53 ANSWER 223 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1989:93802 HCAPLUS
DN 110:93802
TI Anticarcinogenic effects of ascorbic acid, tocopherol, and retinol.
AU Wartanowicz, Maria; Potrzebnicka, Krystyna
CS Zak. Fizjol. Biochem. Zywienia, Inst. Zywn. Zywienia, Warsaw, Pol.
SO Wiadomosci Lekarskie (1988), 41(8), 507-13
CODEN: WILEAR; ISSN: 0043-5147
DT Journal; **General Review**
LA Polish
AB A review with 36 refs. on neoplasm-inhibiting effects of ascorbic acid, tocopherol and retinol.

L53 ANSWER 224 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1986:441599 HCAPLUS
DN 105:41599
TI Role of vitamins E and C in the development of malignant processes
AU Morozkina, T. S.
CS State Med. Inst., Minsk, 220798, USSR
SO Eksperimental'naya Onkologiya (1986), 8(3), 3-10
CODEN: EKSODD; ISSN: 0204-3564
DT Journal; **General Review**
LA Russian
AB A review with 82 refs. on the levels of vitamin E [**1406-18-4**] and vitamin C [**50-81-7**] in **tumor** tissues, the role of these vitamins in **neoplasm** inhibition, and clin. use of vitamins E and C in **cancer** therapy.

L53 ANSWER 225 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1985:77613 HCAPLUS
DN 102:77613

TI Ascorbic acid, stress resistance and reproduction in swine
AU Dvorak, M.
CS Vet. Res. Inst., Brno, Czech.
SO Ascorbic Acid Domest. Anim., Proc. Workshop, 1st (1984), Meeting Date 1983, 80-6. Editor(s): Wegger, Inger; Tagwerker, F. J.; Moustgaard, Johannes. Publisher: R. Dan. Agric. Soc., Copenhagen, Den. CODEN: 53BLAM
DT Conference
LA English
AB The ascorbic acid (AA) [**50-81-7**] status in swine during development was assessed by detn. of AA concn. in their blood serum, urine, adrenal, liver, male genital glands, and boar semen. The high levels found in piglets suggest very good satn. with AA, but apparently also higher AA requirements as compared to older pigs. Piglets with sideropenic anemia had depressed AA levels in the liver and urine. The adrenal showed developmental changes in AA concn. only during the perinatal period and a temporary AA depletion upon ACTH response to **stress**. Enhanced adrenocortical activity had no adverse effects on AA level of either the blood or the liver. Increased requirements for AA can be expected to occur under its insufficient endogenous synthesis in **stress** assocd. with reduced food intake. The relatively high AA concn. found in boar semen shows a relation to sperm concn. and is a result of the activity of the testis, but is also influenced by accessory gland secretions.

L53 ANSWER 226 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1984:453707 HCAPLUS
DN 101:53707
TI Stress and vitamins. 11. Vitamin B2, C
AU Saijo, Eiichi
CS Bayer Japan Ltd., Japan
SO Niwatori no Kenkyu (1984), 59(3), 33-6
CODEN: NNKEDT; ISSN: 0029-0785
DT Journal; General Review
LA Japanese
AB A review with 3 refs. discussing mol. structure, characteristics, physiol. activities, and metab. of vitamin B2 [83-88-5] and vitamin C [50-81-7].

L53 ANSWER 227 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1984:509329 HCAPLUS
DN 101:109329
TI Stress and vitamins. 13. Vitamins K and C
AU Saijo, Eiichi
CS Bayer Japan Ltd., Japan
SO Niwatori no Kenkyu (1984), 59(5), 31-3
CODEN: NNKEDT; ISSN: 0029-0785
DT Journal; General Review
LA Japanese
AB A review with 6 refs. discussing characteristics, metab., and physiol. activities of vitamin K [12001-79-5] and effects of vitamin K and vitamin C [**50-81-7**] on chickens under **stresses** by high temp. and coccidiosis.

L53 ANSWER 228 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1983:574561 HCAPLUS
DN 99:174561
TI Stress and vitamins. 4. Vitamin E

AU Saijo, Eiichi
CS Nippon Roche K. K., Tokyo, Japan
SO Niwatori no Kenkyu (1983), 58(8), 59-62
CODEN: NNKEDT; ISSN: 0029-0785
DT Journal; General Review
LA Japanese
AB A review with 24 refs., discussing characteristics, physiol. activity, deficiency symptoms, and clin. tests of vitamin E [1406-18-4].

L53 ANSWER 229 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1983:70733 HCAPLUS
DN 98:70733
TI Dietary ascorbic acid or procaine penicillin and the response of the immature fowl to stressors
AU Freeman, B. M.; Manning, A. C. C.; Flack, I. H.
CS Houghton Poultry Res. Stn., Houghton/Huntingdon/Cambs., PE17 2DA, UK
SO Comparative Biochemistry and Physiology, Part A: Molecular & Integrative Physiology (1983), 74A(1), 51-6
CODEN: CBPAB5; ISSN: 0300-9629
DT Journal
LA English
AB The effectiveness of dietary ascorbic acid [**50-81-7**] (1 g/kg) and procaine penicillin [6130-64-9] (25 g active base/kg feed) in ameliorating the response of chicks to the **stressors** glucagon [9007-92-5], corticotropin [9002-60-2], withdrawal of food and water, and extremes of environmental temp. (4.degree. and 35.degree.) both short and long-term, has been assessed. No consistent changes in the responses were found, but it is suggested that the rates of inclusion of the substances in the diet, and, subsequently, the amt. of substance taken up by adrenal cortical cells may be important.

L53 ANSWER 230 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1983:196737 HCAPLUS
DN 98:196737
TI Effect of ascorbic acid on experimental carcinogenesis
AU Khar'kovskaya, N. A.; Khrustalev, S. A.
CS All-Union Cancer Res. Cent., Moscow, USSR
SO Eksperimental'naya Onkologiya (1983), 5(2), 3-8
CODEN: EKSODD; ISSN: 0204-3564
DT Journal; **General Review**
LA Russian
AB A review with 76 refs. on the **antitumor** activity of ascorbic acid (I) [**50-81-7**].

L53 ANSWER 231 OF 231 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1973:404095 HCAPLUS
DN 79:4095
TI Recommended daily allowances for vitamin C
AU Yew, Man-Li S.
CS Clayton Found. Biochem. Inst., Univ. Texas, Austin, TX, USA
SO Proceedings of the National Academy of Sciences of the United States of America (1973), 70(4), 969-72
CODEN: PNASA6; ISSN: 0027-8424
DT Journal
LA English
AB Young healthy guinea pigs were fed a scorbutic diet supplemented with ascorbic acid at 4 widely different levels (0.05, 0.5, 5.0, and 50 mg/100

g of body wt/day). Growth rates both before and after surgical stress, recovery times after anesthesia, scab formation, wound healing, and the prodn. of hydroxyproline and hdyroxylysine during wound healing all supported the conclusion that young guinea pigs ordinarily need .apprx.5.0 mg/100 g of body wt. daily. This is far beyond what is needed to prevent scurvy. Under stress the needs are even higher. On a body-wt. basis this amt. is equiv. to a need on the part of a 30-kg human child of 1500 mg of ascorbic acid daily. While calcns. on a body-wt. basis are subject to some uncertainty, the enormous discrepancy (nearly 40-fold) between this amt. and that recommended by the Food and Nutrition Board calls attention to the extreme uncertainty about human ascorbic-acid needs, and to an important public health problem related to the best development of young people.